PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE IX.

CIRCULATION.

Heart.

GENTLEMEN,—The motion of the heart has long been a subject eagerly investigated by physiologists; but only since the introduction of the graphic method into physiology have we arrived at accurate information regarding it. The most direct method for recording the heart's motion is that which we owe to Chauveau and Marey. These ingenious experimenters have supplied us with many instruments adapted for the registration of movements, but none more generally useful than the following, which has been well named the "polygraph." (Fig. 37.) This

FIG. 37.

Chauveau and Marey's polygraph.—L, Lever. A, Circular plate of aluminium resting upon a thin vulcanised india-rubber membrane. This covers a tambour or drum, the interior of which communicates with a tube (T). H, A hinge connecting the lever with the metal plate. H, Handle by means of which the fulcrum of the lever can be raised or depressed. S, Screw by means of which the tambour can be pushed forwards or drawn backwards when it is desirable to apply the power to the lever at a distance from, or near to, the fulcrum.

invaluable instrument consists of a light lever (L), bearing at its free end a pen for carrying ink, or a sharp metal point for scratching a line upon a blackened surface. The fulcrum of the lever can be raised or depressed by a little handle (H). The power is applied to the lever by means of a thin brass rod jointed to the lever above and to a thin circular aluminium disc below. This in turn is glued to a thin vulcanised india-rubber membrane stretched over a little tambour or drum containing air communicating with an india-rubber tube (T). When air is forced into the tambour its elastic roof is raised, and with it the lever. I fill the pen on the lever with ink and place it against the paper of a registering apparatus (Fig. 38). I blow into the tambour, and you observe that the motion which I give to the lever is registered. The ex-

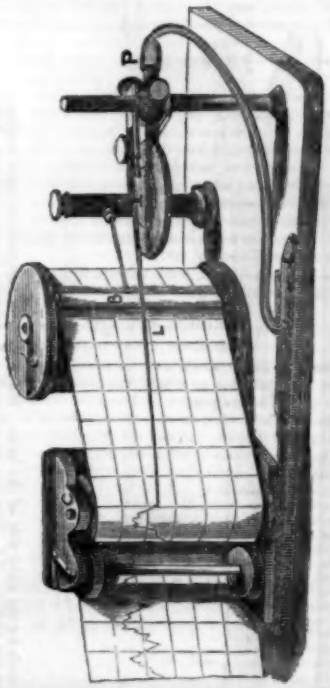


FIG. 38.

P, Polygraph. L, Its lever inscribing its movements upon Marey's double cylinder register. B, A clamp for keeping the paper tight upon the adjoining cylinder, c', while it is drawn off this by the other cylinder (c). (After Marey.)

cursions of the lever can be regulated by causing the power to act near to, or at a distance from, the fulcrum. This we readily do by pushing the tambour forwards or drawing it backwards by means of a screw (s, Fig. 37). The movable roof of the tambour and the lever are all made as light as possible—hence the *aluminium*—in order that there may be little momentum. This tambour can be readily employed for registering the movements of the heart, pulse, lungs, and some muscles by means of Marey's myographic forceps. (Fig. 36, THE LANCET, Nov. 11th.) We only require to put at the other end of its tube a compressible air-tight bag or tambour, consisting, e. g., of a glass funnel with its mouth covered with vulcanised rubber sheathing, and its tube inserted into the rubber tube of the polygraph. Every time we compress the bag or indent the membrane over the funnel we force air out of these into the tambour of the polygraph, and so cause its lever to rise.

In the celebrated experiment in which Chauveau and Marey registered the movements of the heart of a horse, they used three polygraphs such as the above. The pens of these were all placed at a little distance one above the other, and brought into contact with the same piece of paper, so that they wrote their stories one above another. (See Fig. 40.) With two of the polygraphs there were connected two tubes terminating in elastic ampullæ. (Fig. 39.) These tubes were introduced through the right jugular vein, so that the terminal ampulla (v) was within the right ventricle, while the other ampulla (above T v) was within the right auricle. When the auricle and ventricle contracted, they compressed the little air bladders or ampullæ, and squeezed the air through the tubes into the two polygraphs connected with them. In this way the movements of the right auricle and ventricle were recorded. The third polygraph registered the movements communicated to the intercostal space struck by the apex of the heart. In their earlier experiments an ampulla was placed between the ribs in this space, and through it the beat of the heart communicated movement to the polygraph in connexion with it. In this way the movements of the right auricle

and right ventricle, together with those produced by the beating of the heart's apex against the wall of the chest, were all simultaneously recorded. You must at once perceive how valuable must be the information obtained from so ingenious and admirable a method of experimentation. I show you a tracing taken in this way by the French experimenters. (Fig. 40.) The writing points of the three levers were placed vertically above each other, so that when in a horizontal position their points would all touch a vertical line. Vertical lines have been drawn in order to aid the eye in comparing the events recorded in the different tracings. Perhaps you will jump to the conclusion, that after having arranged the ends of the three levers so that all touch a vertical line when the levers are in a horizontal position, we have only to draw vertical lines through any parts of these tracings, and to at once come to the conclusion that the parts of the tracings intersected by a vertical line were all produced at the same moment. It is not so. You see that when I move the lever (Fig. 37) its free end describes a part of a circle. Now, if we have the point of one lever, say an inch above the abscissa, and the point of another lever only a quarter of an inch above the abscissa, a vertical line drawn through the two tracings cannot possibly intersect parts which were simultaneously traced by the levers. To arrive at absolute accuracy we must subject the curves to a correction. We must draw under the trace, or through it, a horizontal line such as that which would be inscribed by the lever in a horizontal position (Fig. 41). Near the origin of the curve we produce a vertical line, or ordinate (o, o'), and then intersect the curve by any number of horizontal lines parallel with the abscissa. We now take a pair of compasses, and separate their points to a distance equal to the length of the graphic lever. We place one point on the junction of

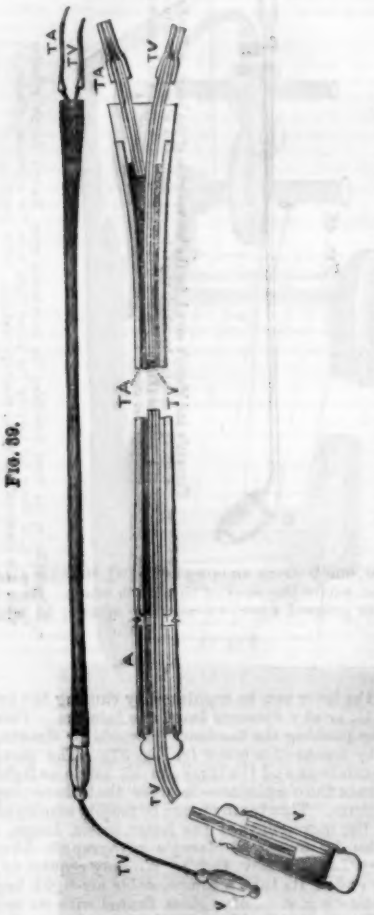


FIG. 39.

Chauveau and Marey's sounds for the right side of the heart. The upper figure represents an entire cardiac sound. TA, Tube for the auricle. TV, Tube for the ventricle. V, Ampulla for the ventricle. The auricular ampulla is seen at the bend of the instrument. The lower figure represents a vertical section of the apparatus enlarged. The letters are the same.

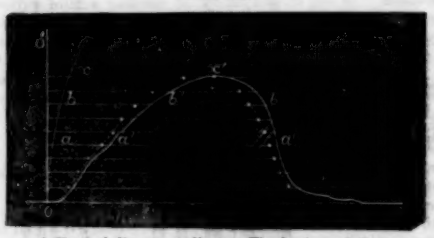
FIG. 40.

A cardiac revolution.

Tracing taken from the heart of a horse by Chauveau and Marey's cardiograph, in the manner indicated in the text. RA, Tracing produced by right auricle. RV, Tracing due to right ventricle. AH, Tracing obtained from the beat of the apex of the heart against the wall of the chest. The dotted lines have been added in order to assist the eye. AS, Auricular systole. VS, Ventricular systole. S, Closure of sigmoid valves. Read the tracings from left to right. (After Marey.)

the ordinate with the abscissa (o), the other limb to the right of this point along the abscissa line, and then describe a curve (o, x). This is the part of a circle described by the lever; and in order to correct the curve (o, a''),

FIG. 41.



o, o', Vertical line or ordinate. The horizontal line, or abscissa, is the lowest of the horizontal lines. o, a'', Curve produced with Marey's myograph by gastrocnemius of frog—see text. (After Marey.)

so as to find out the exact *moment* at which any point of it was produced, and in order to find out the exact intensity of any of its points (see Lecture VIII.), we must measure the distance between any two points on the same level in the lines o o' and o, x, and shift the point of the curve o, a'' which is on the same level towards the left—e. g., the point a' must be shifted towards the left for a distance equal to the interval between the ordinate (o, o') and the point a in the curve o, x. By carrying out this operation at various points we form a new curve (indicated by the dotted line, Fig. 41), in which the error due to the circular motion of the lever is got rid of. In an instrument such as Helmholtz's myograph (Fig. 26, Lecture VIII.), where the lever in its motion, instead of describing the arc of a circle, simply inscribes a vertical line upon a surface that is motionless, no correction of the curve is necessary.

Now, after this very necessary digression, let us return to the cardiac tracings (Fig. 40). After what I have said regarding the correction of the curves, you may feel inclined to ask why vertical lines have been put there at all. But the fact is, that the vertical lines are perfectly per-

missible, provided that the levers have been parallel when they traced the points intersected by the vertical lines. And just at the points where the dotted lines have been drawn the levers have been so nearly parallel that, practically, we are sufficiently accurate in producing the dotted lines in these situations, and in regarding the points of the tracings intersected by them as simultaneously produced. A rise in the trace line indicates compression of the ampullæ inside the heart and of the ampulla between the ribs. The great rise in the auricular trace, R A, is due to contraction of the auricle. Observe that it produces a slight wave in the ventricle (R V), and in the apex trace (A H). The ventricular contraction is marked by a great rise in the ventricular and in the apex tracings; and simultaneous with the ventricular contraction there is a great vibration in the auricular trace. The cause of this vibration is not clear. Possibly the movement of the base of the heart by the contracting ventricles may have something to do with it. The closure of the auriculo-ventricular valves is indicated by a slight curve in the ventricular and apex tracings (just to the right of the dotted line VS). The closure of the sigmoid valves is indicated by a vibration in all the three tracings (s). If you look at the frogs' hearts which are beating before you, you can have no difficulty in seeing that the auricular contraction comes immediately before that of the ventricle, and that it is much shorter than the latter. The tracing shows that the contraction of the auricle entirely ceases before that of the ventricle begins. It is a most difficult matter to determine what amount of the cardiac evolution is occupied by the auricular, and how much by the ventricular contraction. But it is easy to do so when we record the movement. (A straw lever was here laid across the auricle, and another upon the ventricle, of the excised frog's heart; the ends of the levers shod with aluminium foil were placed against a smoked cylinder, and the movements recorded.) To measure the portion of the cardiac revolution taken up by the auricular and by the ventricular contractions, we have only to lay a scale horizontally along each tracing, and measure off the relative duration of the periods of rest and movement. By doing this we find that in the horse's heart (Fig. 40) the auricular contraction occupies one-fifth, and the ventricular contraction two-fifths, of a cardiac revolution. When the tracing was taken the heart was beating very nearly sixty times in the minute. When the rapidity of cardiac action varies it is the length of the pause which undergoes change; there is rarely any marked change in the duration of the contraction.

It is instructive to compare the movement of the left with that of the right ventricle. Chauveau and Marey have performed experiments upon the horse, which enable us to institute this comparison. They introduced into the right auricle and ventricle the sound which I have just described, and they passed another sound (Fig. 42) into the left ventricle through an opening in the left carotid artery. I show you the tracings taken in this experiment by the French investigators (Fig. 43). It is sometimes very convenient to take tracings upon paper previously divided into squares, such as is commonly employed by meteorologists. For tracings such as these it is most valuable, for it enables the eye readily to measure the height and duration of each part of the trace. But, as regards the time, such squared paper is only valuable when the motion of the cylinder of the recording apparatus is perfectly uniform; for, were it not uniform, of course each space between two vertical lines could not have the same value in point of time. (See Lecture VIII.) On comparing the tracings derived from the two ventricles, it is evident that the ventricular movements are synchronous; but it is also evident that, while the maximum of contraction in the case of the left ventricle is attained near the close of the systole, in the right ventricle it is attained shortly after its commencement. This, though generally obtained, is not, however, a constant feature. The pressure exerted within the left ventricle is stronger than that within the right, as indicated by the higher curve produced by the former. The closure of the left sigmoid valves (s″), too, produces a more marked effect than the closure of those on the right side (s′).

In Chauveau and Marey's earlier experiments the apical cardiac movements were communicated to a polygraph through a little elastic ampulla placed in the intercostal pace over the heart. The apex tracing which I have shown you, however (A H, Fig. 40), was taken by means of another instrument invented by Marey, and termed by him the cardiograph (Fig. 44). This instrument consists of a hollow elliptical wooden capsule (F). Two springs are placed

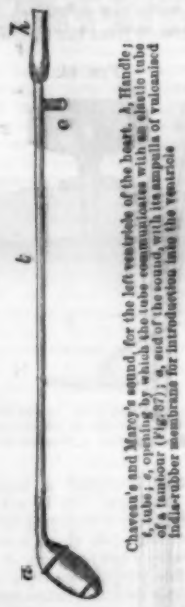


FIG. 42.

Chauveau's and Marey's sound, for the left ventricle of the heart. A, Handle; t, tube; e, opening by which the tube communicates with an elastic tube of a tambour (Fig. 37); a, end of the sound, with its ampulla of vulcanised India-rubber membrane for introduction into the ventricle

in its interior, one bearing an ivory knob (H), which is placed over the point where the apex of the heart beats. Near its fulcrum it is pressed upon by another spring, to which

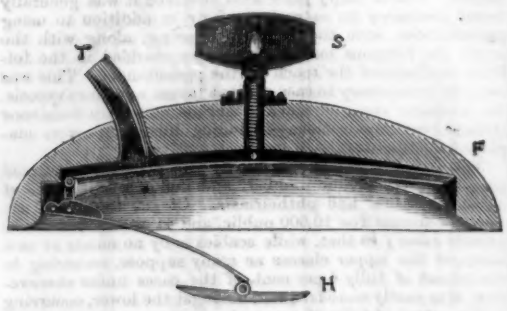
FIG. 43.

Tracings taken from the heart of a horse by Chauveau and Marey.—R A, Right auricular trace. R V, Right ventricular trace. L V, Left ventricular trace. *a*, Auricular systole. *a'* and *a''*, The effects of this upon the ventricular tracings. *v* and *v''*, Ventricular systoles. *s*, Effects of right ventricular systole upon right auricular trace. *s'* and *s''*, Closure of sigmoid valves. These tracings are not so delicate as those in Fig. 40. Probably the friction between the pen and the paper has in this case been greater than in the other. Compare R V, Fig. 40, with R V, Fig. 43.

various degrees of tension may be given by a screw (S). The interior of the cardiograph communicates by a tube (T) to which the elastic tube of a polygraph is connected when the cardiac movements are to be recorded. When the capsule is pressed firmly upon the skin, the interior of the instrument is converted into a closed chamber, and every shock of the heart expels air out of the chamber into the polygraphic tambour. The spring with the knob (H)

depresses the skin when it is relieved from the pressure of the heart, and so the air is drawn back again from the polygraph. Admirable tracings have been taken from the human heart by Marey by means of this apparatus. It is, however, inconvenient for long observations, because the edge of the capsule is apt to rise from the skin, and so permit the air to escape from the interior.

FIG. 44.



Marey's cardiograph. H, Ivory knob on end of spring. S, Screw for tightening spring. T, Tube for connecting the interior of instrument with a polygraph. F, Wooden capsule. Full size (after Marey).

Dr. Sanderson has invented a tambour cardiograph which gives good tracings. It is essentially the tambour and spring of Marey's myographic forceps (Fig. 36, Lecture VIII.), mounted upon three screw legs, and rested upon the chest. Marey's sphygmograph may be used as a cardiograph. For this purpose we have only to place the ivory pad of the spring over the intercostal space where the apex beats, and retain it there. This instrument gives better cardiograms than any other form of cardiograph yet invented. The advantage of the tambour cardiograph is that it can be more readily fixed upon the chest, and that it can be readily connected with a polygraph, so that a tracing of any length can be taken. A long tracing could, however, be taken by the sphygmograph by causing the pen to write upon a long piece of paper, moved by a small register with cylinders (similar to that represented in Fig. 38). When we desire to take a cardiogram from the human chest, it is advantageous to make the person sit erect, or incline a little forwards, in order to permit of the heart's apex acting as much as possible upon the thoracic wall. The respiratory movements disturb the cardiac tracing, and therefore, when a short tracing is wanted, it is advantageous to make the person expire, and to hold his breath with his chest collapsed as long as he can. The state of expiration is chosen because, if the lungs be inflated as in inspiration, the heart is more separated from the anterior thoracic wall than during the state of expiration. The pressure exerted by the cardiographic spring over the heart's apex must be constant during the registration of the heart's movements. A difference in the pressure of the spring gives a difference in the character of the tracing. It is difficult to maintain this constant pressure for any length of time. The instrument may be fixed in position by a strong belt passed round the chest; or, better still, a bar may be placed behind the chest; another bar fixed to this at right angles passes across the side of the chest, and to the latter is fixed at right angles a second bar, which projects in front of the chest. This bar is elastic, and made of whalebone or steel; it can slide up or down the lateral bar, and be fixed in position by a screw, so that it can be adapted to a chest of any capacity. The anterior bar, too, can be lengthened or shortened, so that the cardiograph connected with it can be moved to any point upon the anterior surface of the chest. The elastic bar bearing the cardiograph can at pleasure be taken away altogether, and a rigid bar bearing a tambour, similar to that of the myographic forceps (Fig. 36, Lect. VIII.) be substituted when we desire to connect the instrument with a pneumograph or stethograph. (The arrangement of the apparatus is really essentially like that of the myographic forceps just referred to.) The bar bearing the cardiograph should be elastic, in order that during the respiratory movements the cardiographic pressure may remain as constant as possible. [Cardiac tracings were here taken with the tambour cardiograph, and the sphygmograph used as a cardiograph, and it was demonstrated that, in the same individual, tracings differing from one another may be obtained by (1) varying the pressure of the spring over the heart's apex; (2) varying the position of the body; and (3) shifting the point of the thoracic wall to which the cardiographic pad was applied.]

Now you see with what a fickle instrument we have to deal! See how many are the causes of variation in the results which it affords. How easily we might be led into error by coming to hasty conclusions from a consideration of these results. In order to study any cardiac affection from day to day with the aid of this instrument, see what must be done in order to yield results anything like trustworthy. The pad of the cardiograph must always be in relation to the same part of the heart. The tension of the cardiographic apparatus must be the same. You must readily see how difficult it is to fulfil such conditions, and to, at different times, obtain results which can be compared. By and by we hope to possess, regarding this subject, more perfect information, but, for the present, take particular care what you are about. You have seen, too, that if you merely touch for a moment the tambour of the cardiograph you cause the lever of the polygraph in connexion with it to describe, not a single wave, but a number of waves. There is, first, a great wave indicating the touch, and then a number of wavelets of diminishing size. These wavelets are due to the pendulum-like oscillations into which the column of air is thrown. You have also studied the fact that these secondary oscillations can be largely got rid of by diminishing the mobility of the lever—e.g., by causing a little friction between the pen and the paper; but, again, if this friction be too great the lever fails to indicate delicate movements communicated to the cardiographic tambour.

Next day we will study the innervation of the vascular system.

[A cardiographic tracing is given in Fig. 40 (A H). This, though from the horse's heart, is like tracings which may be obtained from the human heart. For beautiful cardiograms taken from the apex of the human heart see an excellent paper on "Cardiographic Tracings from the Human Chest-wall," by Mr. A. H. Garrod, in the *Journal of Anatomy and Physiology*, p. 26, Nov. 1870.]

ANALYSIS OF 11,000 CONSECUTIVE CASES OF SKIN DISEASE.

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OF the diseases defined by uniform causes, the parasitic affections, which constitute the first class, bulk largely in the present statistics; for of the 11,000 cases, no less than 3561 were dependent upon the presence of parasites. These affections have been divided, as usual, into two sub-classes—namely, (1) affections due to the presence of vegetable, and (2) affections due to the presence of animal parasites. With regard to the first of these, the vegetable parasitic affections, there is much difference of opinion, and consequently much variety in their classification. Thus, Wilson holds that there are no such diseases, the plant-like structures met with in ringworm &c. being, in his opinion, mere degenerations of the structures of which the skin is composed. Others, while admitting the class of vegetable parasitic affections, hold that they are all due to one and the same parasite; while my own opinion, as fully explained elsewhere, and as indicated in the present statistics, is that, regarded from a clinical point of view, there are four fungous growths, productive of four distinct affections, which under no circumstances are transmutable.

The first of these, tinea favosa, due to the presence of the achorion Schönleinii, seems to be much more frequent in Scotland than in England, having been met with no less than 160 times. It rarely occurs except amongst the lowest classes, as is proved by the fact that no less than 156 of the cases occurred in hospital practice, while the four which were met with in private were all in members of the same family, amongst whom it spread by contagion. In this, and in many other instances, the disease was contracted from the lower animals—in most of them directly or indirectly from mice. The frequency of favus in mice, coupled with the mousy odour which is one of the characteristics of the complaint, renders it not improbable that favus was originally communicated to human beings from them.

The next vegetable parasitic affection, ringworm, or tinea tricophytina (due to the presence of the tricophyton), was met with 178 times—36 times amongst the 1000 private, and 142 times amongst the 10,000 hospital cases. These statistics would lead one to the belief that, in Scotland at least, tinea favosa is nearly as common an affection as ringworm, than which nothing could be more erroneous, for there is little doubt that ringworm occurs at least twenty times more frequently than favus; but patients are not nearly so likely to seek advice with regard to the former affection, partly because it is less obstinate and less disfiguring, and partly because of the numerous popular remedies which are in vogue for its removal. It will be observed that, in the opinion of the writer, tinea circinata, tinea tonsurans, and tinea sycosis are mere varieties of ringworm, the first affecting non-hairy parts, the second the head, and the third the other hairy parts of the body, especially the beard. It may be right, too, to mention that under the head "tinea circinata" are classed some cases of that disease first described by Hebra as a variety of eczema, under the name of eczema marginatum, it being a mere variety of ringworm of the body, as I have endeavoured to prove in a recent number of the *Edinburgh Medical Journal* (May, 1868).

The third vegetable parasitic affection, tinea versicolor, that brown patchy eruption which occurs upon the trunk of the body, due to the presence of the microsporon furfur, was met with 121 times, and with almost equal frequency in all classes of the community; but these statistics afford no criterion of its actual frequency, for patients comparatively rarely seek advice with regard to it. There were numerous illustrations of its contagious nature, and many cases also in which it did not seem to be communicable, for all persons are not equally liable to be infected.

The last of the vegetable parasitic affections, tinea decalvans (due to the presence of the microsporon Audouini), occurred 197 times, 44 of which cases were met with among the 1000 private cases. These statistics would lead one to suppose that it is a commoner affection than tinea versicolor: but in reality it is a comparatively rare disease; one, however, which, by destroying the hair, and thus producing much deformity, creates alarm, and hence most cases come under the notice of the physician. There is much difference of opinion as to the pathology of this complaint, but I have no doubt of its parasitic nature; and the reason why the fungus is so generally overlooked is that it is very small compared with the other vegetable parasites, and that it implicates the sheath of the hair rather than the hair itself, so that when the latter is extracted without the sheath, as so often happens, no fungus is discovered. At the same time it comes to be a question whether a few of the cases presenting the naked-eye characters of tinea decalvans are not rather the result of perverted innervation than of the presence of a fungous growth. The case referred to under the head of vitiligo lends support to this view.

It is quite evident that all persons are not equally under the influence of vegetable parasites, a certain soil, as in the case of the higher plants, being necessary in order to their growth; and, as illustrated by the cases under review, debilitated and strumous persons seem specially liable to be attacked. Hence constitutional treatment, with the view of improving the general health, was in most cases resorted to, in combination with local measures. It is not improbable that in some of these cases the constitutional treatment, by rendering the soil unsuitable, might have served to remove the disease, but it was not considered desirable to trust to it alone. The local treatment, which in some instances was resorted to exclusively, consisted in the use of parasiticides, such as the perchloride of mercury (two to four grains to the ounce), the hyposulphite of soda (half a drachm to a drachm to the ounce), and sulphurous acid. Sometimes the eruptions—erythematous, eczematous, &c.,—produced by the irritation of the fungus had a tendency to remain after the parasiticides had completed their work of destruction, and then the subsequent treatment of these eruptions was conducted on the same principle as if they had resulted independent of such special causes. Where hairy parts were involved it was generally found necessary to extract the hair in addition to using parasiticides, with the view of removing, along with the roots, the fungous matter which lay embedded in the follicles and beyond the reach of the parasiticides. This was especially necessary in case of tinea favosa and tinea sycosis. In obstinate cases of tinea tonsurans and tinea decalvans strong local applications—including blistering—were employed successfully.

The parasitic affections due to the presence of animal parasites were 2905 in number, and included two forms of disease, scabies and phtheiriasis. Of the first, 2527 occurred amongst the 10,000 public, and 44 amongst the 1000 private cases; so that, while scabies is by no means so rare amongst the upper classes as many suppose, occurring to the extent of fully 4 per cent. of the cases under observation, it is vastly more frequent amongst the lower, occurring to the extent of fully 25 per cent.

Of the three varieties of phtheiriasis—P. capitis, that which affects the head; P. pubis, that which affects all hairy parts except the head, but especially the hair of the pubes; and P. corporis, that which affects the non-hairy parts; and each due to a separate variety of pediculus—that which implicates the body was by far the most frequently observed, but the exact proportion cannot be stated as the cases were not kept separate in the present statistics. This disease occurred almost exclusively amongst the lower classes, 327 cases having occurred amongst them, and only 7 amongst the private cases; and it was generally found, as in the case of the vegetable parasitic affections, that constitutional treatment, such as cod-liver oil and tonics, in addition to the use of parasiticides, such as ointment of staphisagria and lotions of perchloride of mercury, accelerated the cure and rendered it more permanent.

The proportion of syphilitic cases indicated by the present statistics is somewhat less than had been anticipated, there having been 574 in all, or nearly 5 per cent.; of which 517 occurred amongst the 10,000 hospital, and 57 amongst the 1000 private patients. It was not thought necessary to separate the various forms of secondary and tertiary eruption (488 in number): partly because these are named somewhat arbitrarily from their supposed resemblance to non-syphilitic affections, and have, moreover, a tendency to run into one another; and partly because the treatment adopted depended not so much upon the mere character of the eruption as upon the constitution of the patient and the interval that had elapsed since the contraction of the disease. While, however, mercurial treatment was generally resorted to in cases of secondary, and iodide of potassium in cases of tertiary syphilis, the former was frequently employed with success in obstinate cases of tertiary syphilis after the latter had failed. Simple tonic treatment was often made use of when the state of the general health appeared to demand it, but it was not relied upon alone in the general run of cases; and, indeed, the results of the treatment, of which the above is an outline, are altogether opposed to the too fashionable belief that anti-syphilitic treatment is unavailing, and that tonic treatment and a reliance on the "vis medicatrix naturæ" is all that can be desired.

Of hereditary syphilis there were 62 examples, almost all of which occurred in the infantile period. Of the non-infantile cases, of which hardly any notice is taken by authors, one or two may be alluded to. One of these was a case of pemphigus occurring in a little girl about nine years of age. The eruption of bullæ was somewhat circumscribed, being most abundant about the privates, around the mouth, and on the arms and legs. The eruption assumed the form of segments of circles, as syphilitic eruptions so often do; the stains left by it were somewhat coppery; and there was a distinct history of miscarriages in the mother. She improved greatly under a course of grey powder. A somewhat similar case, treated, however, by iodide of potassium, was reported by me in THE LANCET (June 18th, 1870, p. 868). There can be no doubt that not a few cases of skin disease

are classed under "eczema"—for they present almost all the characters of obstinate chronic eczema—which are really cases of hereditary syphilis, one of which I have reported in THE LANCET (ibid., p. 867).

Strumous affections, of which there were 557 examples, are nearly as numerous as syphilitic, if we include strumous glands, strumous abscesses, and strumous ulcers; but if we exclude them, it will be found that they are much less numerous, there being only 261 amongst the whole 11,000 cases. An attentive observation of the cases of lupus afforded no corroboration of the view that that disease is not essentially a strumous one, as many assert; and the fact that sometimes no other manifestation of the strumous diathesis was present is no better argument against its strumous character than is the absence of any other strumous manifestation against the strumous character of strumous adenitis. Of the two varieties of lupus, lupus erythematodes and lupus vulgaris, the former was only exceptionally met with; while lichen scrofulosorum, the papular eruption described by Hebra, seems to be rarer in Scotland than in Austria, if we may judge by the present statistics, only five undoubted cases having been noted. Strumous affections not belonging to lupus or lichen have been classed under the head of "scrofuloderma," of which there were 33 cases, and in which is included that variety described by me under the head of "scrofuloderma verrucosum."* The constitutional treatment of this group consisted in the use of the usual anti-strumous remedies, such as cod-liver oil, steel, sea-air, and attention to the general health; while, locally, caustics were for the most part relied upon, of which the solid nitrate of silver and the acid nitrate of mercury were most frequently used. The constitutional treatment was found most useful in preventing relapses; the local, in removing existing manifestations.

It is unnecessary to dwell upon the last group of diseases defined by uniform causes, the eruptive fevers; as these, for obvious reasons, were only exceptionally observed at the dispensary, while those occurring in private practice were excluded from the present statistics.

(To be continued.)

ON THE

FUNCTIONS OF THE SYMPATHETIC SYSTEM OF NERVES, AS A PHYSIOLOGICAL BASIS FOR A RATIONAL SYSTEM OF THERAPEUTICS.

BY EDWARD MERYON, M.D., F.R.C.P.,
LATE LECTURER ON COMPARATIVE ANATOMY AT ST. THOMAS'S HOSPITAL.

(Concluded from page 708.)

SUGGESTIONS IN SUPPORT OF A RATIONAL SYSTEM OF THERAPEUTICS.

A VOLUME might be written on the correlation of nerve and medicinal action upon the minute vessels of the stomach, and on the function of that organ generally; but the special influence of each does not appear to me to admit of the proof which I conceive to be adducible in relation to more exclusively glandular structures, because the evidence upon which any satisfactory inferences can be founded is so conflicting that I will not attempt to force the sway of fancy into the throne of truth. When men like Bernard, Kölliker, and Heidenhain maintain one view respecting the influence of the pneumogastric and splanchnic nerves on the stomach, and Bidder, Vulpian, and Nasse entertain the very opposite, I may be excused from speculating on either side. My conviction, however, is that there is a reciprocity of action between the vaso-motor nerves of the stomach and medicinal agents calculated to act on them.

The influence possessed by the ganglionic nerve-centres on the chemical phenomena of life can be simulated, increased, or diminished by special medicines. The increased supply of starch in the cells of the liver, and the diastose acting on it to produce an increased secretion of grape sugar, as caused by section of the sympathetic nerve-fibres, or by irritating the nucleus of the par-vagum in the medulla oblongata, may also be induced by the action of mercury.

And here I would adduce the liver to prove that something more than mere vascular fulness is necessary for the functional action of a secreting tissue; for such dilatation of vessels may, and often does, occur without a corresponding secretion of bile. By the suspension of the reflex influence of the sensory nerve-fibres, active hyperæmia of the hepatic artery may lead to hypertrophy of the organ, or hyperæmia of the portal veins may result in structural degeneration, without an increased outpouring of bile at any time.

The very term *erythema mercuriale* is something like testimony that mercury acts on the sensitive nerves; and the more manifest physiological action of that drug is to produce a dilatation of the capillaries in a great number of important organs, and on a large extent of mucous surfaces. Orfila and Christison agree that in all cases of poisoning by mercury, when the first result is not chemical decomposition or corrosion of tissues, the leading symptoms are those of inflammation of the mouth, throat, and alimentary canal—salivation and mercurial erethism in one or more of its multifarious forms; bloody vomiting and purging, in conformity with Cohnheim's and Stricker's views of the permeability of the vascular walls by the blood-corpuscles.*

The influence of the splanchnic nerves and of their ganglionic centres is distributed over a very wide area of the vascular system. Dr. Schmidt, of Rotterdam, associates Addison's disease with a morbid condition of the abdominal sympathetic; and there is great reason for the suggestion, seeing that the general anæmia, the palpitating heart, the soft and jerky pulse, and the feeling of faintness and breathlessness on attempting any exertion, are all indications of heart and vascular disturbance, with which Dr. Addison, assisted by Mr. Quekett, did find disease of the semilunar ganglion in one case of leucocythæmia.† Professor Tigri, of Sienna, has also reported a case of hæmorrhage into the ganglia of the great sympathetic in which there was a bronzed skin and every other symptom of Addison's disease.‡

The wide distribution of the influence of the splanchnics, as vaso-motor nerves, has its counterpart in the wide extent of the action of mercury and of iodine.

In the catalogue of remedial agents, it is no uncommon thing to find some one which acts differently at different periods of time, or as the dose differs. Opium is one of these; its primary operation being that of a stimulant to the motor fibres of the vaso-motor nerves; but, ulteriorly, it is a sedative to both sensory and motor fibres; and thus it acts on those fibres of the hepatic plexus which, on entering the transverse fissure of the liver, are distributed, right and left, over the coats of the hepatic artery and portal veins. It has, therefore, an effect diametrically opposite to that of mercury. But I can well understand how calomel and opium may be combined to produce the incitive influence of the one with the calming effect of the other, so as to turn the balance of function on the side of the fibres of Remak, the attribute of which I have assumed to be to regulate the stream of blood which is conveyed by the arterioles into the cell territory for healthy secretion and nutrition.

This tranquilising influence is possessed by conium, and, especially so, by the bromide of potassium.

Mercury influences the vaso-motor nerves of the intestines, precisely as it does those of the liver. By stimulating the motor fibres, a preternatural secretion from the glandular and epithelial structures is induced, just as it is by the section of the cœliac and mesenteric plexuses, as performed by Rudge on rabbits. Opium has an antagonistic action, as have also hydrocyanic acid, cannabis, and many astringents.

The *modus operandi* of diuretics generally is so different that we should have a clear apprehension as to what we propose to accomplish by their agency before we can expect to use them with success.

Experiments on the nerves we must take with some degree of circumspection, because it has been found that

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* Journal of Cutaneous Medicine, vol. i., p. 26.

* Ueber entzündung und eiterung. Virchow's Archiv, 1867, vol. ii.

† Addison's Works, published by the New Sydenham Society, vol. 36, p. 213.

‡ Journal de Médecine de Chirurgie et de Pharmacologie. Bruxelles: Nov., 1870.

certain lesions of the medulla oblongata, or section of the vagus or pneumogastric, may be productive of diabetes; but if diabetes be regarded as the result of disturbance of the functions of the brain and nervous system, or as cause rather than effect of kidney disease, for which we have high authority,* then may we reason on the correlation of nerve and medicinal action.

In nephritis we have the pathological counterpart of the experiment by Eckhardt (p. 602), except that the urine is scanty; but that may depend on the disease affecting the capillaries of the tubuli uriniferi chiefly, and not the Malpighian capillary system.

Turpentine and cantharides produce the same effects, even to the sympathetic vomiting, and pain in the testicle, thigh, and leg, by the specific irritation extending to the solar and spermatic plexuses. Belladonna, aconite, and uva-ursi, either by stimulating the inhibitory nerves of Remak, or by subduing the force of the sensory and motor fibres of the renal plexus, have the very opposite influence. I do not of course pretend to say that these drugs should be depended upon exclusively in nephritis, and that general or local depletion should be disregarded as a means of relieving the congestive turgor of the renal capillaries. My great object is to illustrate the proposition with which I started—namely, that as each element or nerve-fibre in the ganglionic centre has its special attribute, either of dilating or contracting the capillary vessels, so have we medicinal agents which either stimulate the motor nerve fibres of the vaso-motor nerves, and dilate the capillaries, or which act as sedatives on the motor and sensory nerve-fibres of the vaso-motor nerves, or give ascendancy to the nerve-fibres of Remak, and contract the capillaries.

If it be so, we have an explanation why the salts of potash, which have been prescribed empirically in nephritis, do more harm than good; for they enter into the category of such medicines as juniper, buchu, colchicum, and squills, which stimulate the motor fibres of the renal plexus, and increase the secretion of the salts which characterise the urine. We may also understand how it is that, in thus acting as diuretics, they do not necessarily induce diuresis. The additional stimulus which digitalis gives to the general circulation by its action on the heart, may, I suppose, affect the capillary system of the Malpighian bodies, and so flush the tubuli uriniferi and wash out the secretion of their epithelial cells. Hence the great advantage of digitalis in nephritis; for just in proportion to the outpouring of fluid from the Malpighian capillary system, the turgescence of the tubular capillary system is diminished. Digitalis has been regarded almost as a specific by the Germans especially, and by Foville in France, in those cases of maniacal disease in which there is disproportioned strength in the carotid and temporal arteries, together with high-coloured and scanty urine.

In the straight tubuli uriniferi, which serve as conduits to the pelvis of the kidney, and in the ureters and bladder, we find the lamelliform epithelial cells which secrete mucus; and in most cases of preternatural mucous secretion from these parts, unconnected with mechanical causes, I can vouch for the beneficial action of ergota and bromide of potassium. In many forms of leucorrhœa, also, a combination of these drugs is very effective.

These last remedial agents are nervine sedatives to the cerebro-spinal system, and consequently to the sensory and motor fibres of the vaso-motor nerves. As such, they lower the pulse, diminish the temperature of the body, and act as anaphrodisiacs on the organs of generation; whereas phosphorus, by exercising an antagonistic influence, is a powerful aphrodisiac. I need scarcely insist upon the inseparable association of this attribute with an increased vascularity of the parts concerned.

From the facts which I have adduced, it may, I think, be inferred, and with moral certainty, that there is an invariable correspondence between functional activity and circulation: furthermore—and I have the authority of Schiff in asserting it—that the dilatation of the arterioles is neither the result of reaction after previous contraction, nor the mere result of an afflux of blood to an irritated part, nor is it independent of nervous action, but that it occurs under the influence of sensory and motor nerves.†

* Neubauer and Vogel on the Urine: translated for the New Sydenham Society, by Dr W. O. Markham, p. 320.

† Comptes Rendus, vol. lv., Sept. 29th, 1862.

It can scarcely be objected to the proposition with which I started that I have not adduced sufficient evidence to prove that vascular contraction is also the result of nervous influence; and it is impossible that one nerve, or one form of nerve, can perform the double office of dilating and contracting the calibre of vessels.

Seeing, therefore, that most pathological conditions are but modifications of physiological actions, and the effects of derangement of the operations of the vaso-motor nerves, on which the healthy functions of all organs depend, it appears to me that on the knowledge and due appreciation of such aids we may found a rational and a scientific system of therapeutics.

In these suggestions I do not, of course, include those remedial agents which act mechanically or chemically, but those only which have an influence on the vaso-motor nerves, and the great majority of medicines with which we are acquainted will fall into the category of these latter.

There is every reason to believe also that they may be grouped in accordance with some natural principle, just as plants which belong to the same natural order possess similar characteristic properties, physiological and therapeutical.

An attempt has been made by Dr. Broadbent to form chemico-therapeutical groups, and to show "that substances closely allied chemically must have an analogous action on the system, or that the diversity of their operation should be capable of explanation on chemical principles." In other words, "that chemical groups ought to form therapeutical groups."*

I have purposely abstained from alluding to alcohol as a remedial agent in inflammation, because of the conflicting opinions which have resulted from its employment. But if, by acting chemically on the tissues generally, it restrains the metamorphosis of the blood-corpuscles from rapid disintegration; if it can restrain the albumen in the blood, which it is the nature of many diseases to cause to escape; if by such chemical action alone it can render the walls of capillaries less permeable to the blood plasma which is flowing through them—and all these attributes it has been said to possess,—then, I think, the diffusible action of alcohol as a stimulant to the body generally, equalising the circulation, and re-establishing the balance of function which it is the nature of disease to disturb, must commend itself to our reason, as it is said to have shown itself beneficial in practice.

Clarges-street, 1871.

PRELIMINARY NOTICE ON

THE TREATMENT OF EMPHYSEMA OF THE LUNGS BY ARTIFICIAL EXPIRATION.

BY J. B. BERKART, M.D., &c.

EMPHYSEMA of the lungs, whatever cause may have produced it, chiefly consists of a permanent morbid dilatation of the air-vesicles, and consequent increase of the residual air within them. It is attended by the so-called asthmatic attacks, habitual dyspnœa, and cough, due to a catarrh of the bronchi, and has moreover a pronounced tendency to lead to organic disease of the heart. Whilst under normal conditions (according to Donders), the pressure on the inner surface of the thorax is in the different stages of respiration from 7¼ to 30 millimetres of mercury less than that on its outer surface, on account of the loss of elasticity of the lung-tissue this difference is considerably lessened—nay, almost entirely abolished. The immediate consequence is "the permanent inspiratory condition" of the thorax, in which the diaphragm is prevented from reascending to its expiratory position, because the co-operation of the most potent factor—namely, the traction of the elastic lungs on its upper surface—is lost. Thus ensue the disturbances of respiration and circulation.

When the mechanism of the pathology of emphysema began to be understood, manual compression of the chest, as well as that by the act of vomiting and the application of electricity to the diaphragm, were used in the treat-

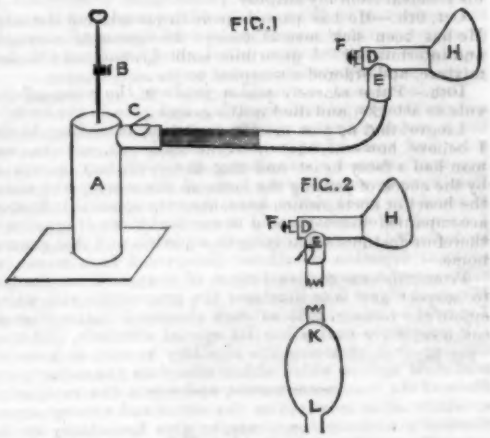
* Proceedings of the Royal Medical and Chirurgical Society, 1869, p. 84.

ment of emphysema. But the result of that treatment is not at all satisfactory; because the pressure exerted acts at the same time on the outlets also of the dilated alveoli, and the mucous membrane of the bronchi being in a state of catarrhal swelling, the outflow of the air from the alveoli is prevented rather than facilitated. Better results were obtained by the inhalation of compressed air. The patients who have tried it do not cease praising its beneficial influence on their sufferings. But, apart from the costly apparatus, which is not within the reach of everybody, the inhalation of compressed air has only a temporary influence, by supplying a greater quantity of oxygen in a smaller volume of air. By it the intra-vesicular pressure is in no way diminished, nor is the residual air renovated to any considerable extent. A current of air from the greater (intra-) to the lesser (extra-thoracic) pressure soon establishes a balance; and if any difference of pressure previously existed, it now ceases, for the reasons just indicated.

The idea naturally suggested itself that, if it were possible to reduce the intra-vesicular pressure, and that also resulting from it on the thoracic surface of the diaphragm, by some mechanical contrivance, not only the want of oxygen would be satisfied, the emptied space being retaken by the influx of fresh air, but the compressed healthy air-vesicles might re-expand, and, by a methodical application of that contrivance, a part at least of the functional activity of the diaphragm might be saved. For the long-continued contraction of the diaphragm must ultimately lead to fatty degeneration of its muscular fibres, just as it does in other muscles. The catarrh of the bronchi, also due to the stasis in the remaining capillaries, must be benefited by it. The pressure being taken off from the venæ cavæ and the heart, the return of the venous blood from the greater and lesser circuit would be facilitated. Now in each ordinary quiet respiration 500 cubic centimetres of air are inspired, and as many expired. In emphysema, in spite of the long duration of expiration, which is three times that in health (F. Riegel), a much smaller amount than 500 cubic centimetres is expired, and consequently inspired also. It is therefore perfectly safe to use a contrivance by means of which air up to 500 cubic centimetres can be withdrawn at each expiratory act; and, on considering the nature of emphysema, it must be equally safe to withdraw as much at the *end* of each natural expiration. My views on this subject have been confirmed by the experiments of Dr. Hauk of Vienna. With a somewhat bulky instrument, a modified Hutchinson's spirometer, which, if safety is to be ensured, has to be worked by two assistants, he first used compressed air in croup and in emphysema. Subsequently he found that, if emphysematous patients were allowed to expire into an atmosphere the pressure of which is from four to eight inches of water less than that of the air, the relief they obtained was greater and more lasting than by the use of the compressed air: and his brilliant results have been fully corroborated by Drs. Hagel and Mader, of Vienna. I therefore designed two instruments, which Mr. Hawksley, of No. 4, Blenheim-street, New Bond-street, constructed for me; and I have been using them for some time with the best results. The annexed woodcuts represent the instruments.

Fig. 1: A is an exhausting syringe, the piston-rod of which is divided to represent cubic centimetres, so that by means of the adjusting stud, B, the amount of action of the piston may be measured and regulated. The piston-rod is always raised by means of a helical spring fixed in the upper part of the cylinder, and exhaustion is produced by depressing it with the hand. The capacity of this syringe is known. H is a mask of metal, shaped so as to be readily adapted to the face, and enclosing both mouth and nose. The juncture of the edge of the mask and the face is effected by a cushion of india-rubber, which effectually prevents the escape or admission of air. It is attached to the face by a band round the head, or is held by the hand. Proceeding from the mask is the chamber, D, and the tube, E. At the point D within the chamber is an inspiratory valve, and at the point E an expiratory one. C is also an expiratory valve. F is an inspiratory valve, under command of the finger of one hand. The mask and syringe are united by about eighteen inches of stout tubing.

Fig. 2 represents the mask and valve detached from the syringe. The expiratory valve, C, in Fig. 1 is placed at E in Fig. 2. The necessary exhaustion is produced by an india-rubber ovoid, holding about 15 cub. in., and is compressed one or more times at the end of each expiration. The mask, H, is carefully fitted, and attached firmly to the face. On inspiration taking place air enters at F and D; upon expiring, the valve D closes, while E and C open. The last feeble



flutter of the valve C indicates the end of expiration; then the spring valve, F, is closed with the finger, and the piston depressed the required amount, producing a further expiration. On removing the hand from the piston-rod, it rises as shown in the woodcut; and upon releasing the valve F, inspiration again takes place. In using the instrument shown in Fig. 2, at the end of expiration the ovoid is rapidly compressed and as rapidly released, when artificial expiration is produced. This way may be repeated as required.

The instruments are to be used twice a day for a quarter of an hour each time, and to be continued for some weeks. Patients of average intelligence are, after a few sittings, able to use the instruments themselves. Even after the first application of the instrument the patients experience great relief, and delight in showing that they are now able to take a deeper breath, and their oppression gradually ceases. The respiration becomes deeper, and its frequency diminishes from 25 to 16 per minute. The expectoration is at first increased, but easy, and soon ceases entirely.

Bronchorrhœa and great dyspnœa are no contraindications; only in the latter condition the operation is frequently to be interrupted. As regards the amount of air to be withdrawn, the feeling of every patient is carefully to be consulted. I defer the analysis of my observations for some time; and I hope shortly to be able to lay down a series of rules, based on exact measurements and calculations, for the use of the instruments in individual cases.

Harley-street, Nov. 1871.

CATHETERISM; SYNCOPE; EMBOLISM; DEATH.

By FRANCIS D. LYS, M.R.C.S.E.

THE following case, though happily rare, shows the necessity for increased caution even in the slightest surgical procedure upon those patients in whom we have reason to suspect any cardiac lesion.

J. S., a very stout man, aged sixty-two, had always enjoyed good health till within the last few months, during which he has suffered from atonic dyspeptic symptoms, for which he consulted me on October 5th, and again on the morning of the 8th, when he was somewhat better, though his pulse was weak, and he complained of shortness of breath when walking up-hill. While driving home he wanted to pass urine, but was prevented by the presence of a female. On his arrival he had lost the power to relieve himself, and came to me again in the evening.

I passed a No. 10 catheter for him whilst in the recum-

bent position, and, having done so, he sat up in order that he might the better empty his bladder, which contained about fifteen ounces—certainly not more. He now complained of feeling faint, which induced me to lay him down again and to give him stimulants. In spite of this, he remained almost pulseless for more than an hour, and it was quite two hours before he sufficiently rallied to admit of his removal from my surgery.

Oct. 9th.—He has passed urine twice without difficulty. He has been sick several times. His pulse is very weak and intermittent. I gave him milk, beef-tea, and brandy mixture, and ordered a sinapism to the epigastrium.

10th.—Pulse scarcely perceptible. He had several convulsive attacks, and died in the evening.

I regret that no post-mortem examination was practicable. I believe, however, that it would have revealed that the man had a fatty heart, and that during the syncope caused by the shock of passing the catheter a clot formed either in the heart or aorta, which prevented his recovery. Nobody accompanied him except a little boy to drive him; it is therefore fortunate that he rallied sufficiently to be removed home.

From this case, it seems to me that when there is reason to suspect any weakness in the heart, it is advisable to enjoin the recumbent posture till after the removal of the catheter, if not for a short time longer.

Bere Regis, Blandford, Oct. 16th, 1871.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CLINICAL REMARKS ON A CASE OF TUBERCULAR CONSOLIDATION OF THE LUNG, COMPLICATED WITH BRONCHITIS.

(By Dr. WILSON FOX.)

THE patient is a man of middle age, has a cough accompanied by free expectoration, and is rather wasted. On examination of the chest, the right side was found to be flattened at the apex and the base anteriorly. In the former situation were observed the physical signs of a cavity; in the latter, flattening, dulness, and absence of respiratory murmur, indicated consolidation and shrinking. The left side was prominent, dull on percussion in places, and yielded the sounds characteristic of chronic bronchitis. The heart's apex was felt to beat to the right of the sternum, but the sounds were healthy. It appeared that since the patient had had "inflammation" of the right lung two years previously, his health had gradually but steadily declined. Shortly before admission the left lung suffered an attack of bronchitis, of which, as just stated, it now presents chronic symptoms.

Dr. Wilson Fox pointed out that this case afforded an illustration of the truth that pulmonary phthisis is not a disease distinct and independent in its origin, but one which is liable to be grafted on to any affection which impairs the nutrition of the lungs, in virtue of a predisposition which consists in an irritable condition of the lymphatic system. Given this irritability, an individual is liable to become the subject of tuberculosis under any circumstances which increase the vulnerability of his tissues; without it he will probably enjoy immunity from that disease.

Viewed in the light of the physical signs, the patient's history would be as follows:—Pneumonia of the right lung was followed by tuberculosis, of which the present results were a cavity at the apex, due to softening and breaking down of the lung-tissue, and consolidation of the base. The left lung, which probably became compensatively emphysematous, in consequence of the induration and contraction of the right one, had recently suffered from an attack of bronchitis, which had excited the same morbid process as that which followed pneumonia in the right, as shown by patches of dulness indicative of the existence of nodules of consolidation. That the heart was found to beat to the right of the sternum was in the main to be attributed to its having been drawn over by the shrinking of the right lung, though, in some small measure, it might also be due to emphysema of the left lung and dilatation of the right side of the heart produced by the pneumonia on the right side. It did not follow from there being but little observable jugular pulsation that the right side of the heart had not undergone dilatation, for the tricuspid valve might have maintained its competence in consequence of the diminution in quantity of the blood which might be expected to result from prolonged deficiency of oxidation.

In reference to the treatment of the patient, Dr. Wilson Fox remarked that the word "expectorant" is made to apply to two classes of drugs which have opposite effects, and which therefore must be used with discrimination where it is desired to act upon the bronchial mucous membrane. Lobelia and ipecacuanha are expectorants in the strict sense of the term, inasmuch as they promote secretion; squill, tolu, senega, and other remedies of this class, on the contrary, have an opposite effect. In the present case, he should at first restrict the patient to a mild and nourishing diet, and, with a view to checking the expectoration, order him to take a draught containing opium and ammonia, and to inhale the vapour of water medicated with one drop of creasote to the pint, and such a proportion of conium as might be expected to give repose to the bronchial tubes without interfering with the expectoration of their discharge. After the lapse of a short interval he hoped to give him a full diet, with steel and cod-liver oil.

GREAT NORTHERN HOSPITAL.

OPERATION TO LIBERATE THE PENIS FROM A CURTAIN OF SKIN DRAWN DOWN BY CONTRACTION OF THE CICATRICES OF A BURN.

(Under the care of Mr. GAY.)

THE operation we are about to describe was undertaken for the cure of the following curious deformity. A boy about nine years of age had sustained an extensive burn on the perineum and the inner aspect of the thighs, and the contraction of the resulting cicatrices had not only so completely appropriated the skin of the scrotum as to push up the testes almost beyond the possibility of recognition, but also drawn the abdominal integument downwards in front of the penis, in the form of a tightly-stretched and arched curtain, which passed from thigh to thigh, and concealed from view all but the tip of the prepuce. It also interfered considerably with the movement of the thighs in walking. The finger could be passed up to a distance of about one inch on the posterior aspect of this curtain, which thus was found to consist of a double fold of integument, of which one surface looked forwards while the other rested against the dorsum of the penis. With a view to relieving the tension of the integument and liberating the penis, an incision about an inch in length was carried through this curtain about half an inch on either side of the median line, and it was proposed to unite to each other the anterior and posterior lips of the divided portions; but the tension remained so great, and the adjoining tissues seemed so inelastic, that Mr. Gay freely reflected on to the thigh and perineum respectively the divided flaps of skin on either side, and, by careful dissection, removed a considerable quantity of firm and unyielding subcutaneous fibrous tissue. Some healthy skin was brought up from the perineum to form a new scrotum, and the adjoining edges of the divided skin were then brought into apposition by means of sutures on the right side; but this was accomplished somewhat at the expense of the left side, where there remained a surface of about the size of a crown-piece on the left groin, over which the skin could not be stretched with any prospect of union; it was therefore left

to granulate with a view to covering it ultimately by skin transplantation.

Three weeks later we found that a little sloughing had taken place on both sides, where the tension was greatest; but the penis was quite released from its abnormal surroundings, and there seemed every prospect of the granulations being covered by skin-grafting in a manner which would obviate any further obstruction to the movements of the lower limbs.

EXCISION OF THE HEAD OF THE FEMUR.

On Wednesday last Mr. Gay excised the head of the femur in a child five years of age, who had disease of the hip of twelve months' standing, and was admitted in a state of exhaustion, with numerous pus-discharging openings in the thigh and groin. The capsule had been opened by the disease, but dislocation had not taken place. A small piece of necrosed bone was liberated from the upper part of the acetabulum at the same time.

MR. ADAMS'S CASE OF OSTEOTOMY.

The general progress of this patient's case is satisfactory. With the exception of a rise of temperature on the day following the operation, there has been no constitutional disturbance. But only very limited movement of the femur independent of the pelvis has as yet been obtained, although the weight by which extension is being made has been gradually increased from three to eight pounds. This rigidity appears to be due, to a considerable extent, to insufficiency of skin on the anterior aspect—a condition which is scarcely to be wondered at when it is considered that, for ten years before the operation was undertaken, the femur had been maintained at such an angle that the trochanter major was on a level with the anterior inferior spine of the ilium. On the occasion of our last visit to this patient (the eighteenth day), there was no tenseness of integument at the point where the incision had been made, nor thickening in its track, and not a drop of pus could be squeezed from the minute aperture in the skin.

Mr. Adams proposes to attempt forcible extension under chloroform on Wednesday next.

PROVINCIAL HOSPITAL REPORTS.

ST. MARY'S HOSPITAL, MANCHESTER.

SEVEN CASES OF OVARIOTOMY.

Communicated by Mr. HENRY RUNCORN, House-Surgeon.

(Under the care of Dr. LLOYD ROBERTS.)

CASE 1. *Removal of the right ovary, with a fibro-cystic tumour of the uterus weighing twenty-three pounds; recovery.*—Margaret M——, aged thirty-two, single, noticed the enlargement twenty-seven months before admission. It was not more marked on one side than the other. She had never been tapped. The abdomen measured forty-three inches in girth over the umbilicus, and from the ensiform cartilage to the pubes twenty-three inches. Fluctuation could be felt over the whole of the tumour. The uterus was movable, slightly hypertrophied, and was raised with the tumour when the latter was elevated by external manipulation.

Ovariotomy was performed under the influence of bichloride of methylene, administered by Dr. Junker's apparatus. An incision, three inches in length, was made down to the tumour, considerable hæmorrhage arising from the divided vessels of the abdominal wall, which was arrested by torsion. Some firm adhesions between the front of the tumour and abdominal parietes were separated, and a large syphon trochar was plunged twice into the tumour, but no fluid passed through it. The primary incision was enlarged to the extent of one inch above the umbilicus, and the tumour was brought through the abdominal wound. The pedicle, which was three inches broad and very short, was secured by a circular clamp. Some blood-clots were removed from the abdominal cavity, and the wound was brought together by five deep sutures of silk, and dressed with carbolised lotion and plaster, without the use of any abdominal bandage. With the exception of some dysuria on the sixth and seventh days, the patient had not a single unfavourable symptom. The clamp was removed on the sixteenth day, and a smaller one which was substituted was finally removed on the twentieth day. She left the hospital on the forty-sixth day.

The tumour when examined was found to consist of the right ovary in an early stage of cystic disease, with a fibro-cystic tumour of the uterus. It was pedunculated. The diseased ovary and Fallopian tube, except its fimbriated extremity, were firmly united to the tumour.

CASE 2. *Ovariotomy; unilocular ovarian cyst of the left side; ligature cut short; pedicle returned.*—Elizabeth P——, aged forty-nine, was a widow, and had had one living child and one miscarriage. The catamenia had ceased four years previously. A year after that event she noticed a swelling in the left side of the abdomen. On admission the abdomen was found to be large and prominent, yielding general fluctuation over the front and sides of the tumour and resonance over both flanks. The girth at the umbilicus was thirty-eight inches; from the ensiform cartilage to the pubes measured eighteen inches; the uterus was two inches and three-quarters lower in the pelvis than normal. Fluctuation was felt in Douglas's space on the left side. The patient had not been tapped.

The tumour was exposed and tapped with a large syphon trocar. The fluid withdrawn presented a dark grumous appearance. The tumour was then drawn through the wound, and the pedicle, a broad and fleshy one an inch and a half in length, was secured by a ligature which was cut short, and, the tumour having been separated, the stump was dropped into the abdomen. No fluid entered the peritoneal cavity. The abdominal wound was brought together by silk sutures, and dressed as in the above case. The incision was three inches in length.

With the exception of flatulence which troubled this patient for a few days, she presented no unfavourable symptom. The wound had healed by the seventh day, and on the eleventh she was convalescent. The tumour was unilocular, and with its contents weighed 19½ lb.

CASE 3. *Multilocular ovarian tumour of the left side; ovariotomy with use of clamp; recovery.*—Annie B——, aged twenty-four, was married, but had had no children. She first menstruated at twelve years of age, and had been regular ever since. The swelling commenced five years before admission after a fall. The abdomen measured, over the umbilicus, forty inches; from the sternum to the pubes, twenty-one inches. The globular fluctuating tumour inclined to the left side. Fluctuation could be felt in both flanks. The uterus was normal in size, with a small cervix. The tumour compressed the bladder and caused frequent desire to urinate. She had never been tapped.

The operation was performed under the influence of bichloride of methylene. One large cyst was tapped in front, and a smaller cyst was then emptied. The two emptied cysts, and a number of smaller ones unopened, were drawn through the wound, and the pedicle, two and a half inches in length, was secured by a clamp. The abdominal incision was secured by silk sutures. The incision in this case was two inches in length. On the fourth day after the operation the patient had an urgent attack of dyspnœa with bronchial râles, which was subdued by a linctus, sinapisms, and brandy-and-water. The wound had healed by the eighteenth day, when the clamp was also removed.

CASE 4. *Multilocular ovarian tumour of the left side, weighing twenty-seven pounds and a half; recovery.*—Martha H——, aged twenty-eight, was a married woman. The abdomen was much distended, irregular in shape, and bosselated. The fluctuation was localised; the swelling on the left side was solid; the linea alba was drawn towards the left side. The cyst on the right side reached to the ensiform cartilage, was conical in shape, and fluctuated distinctly. The girth at the umbilicus was forty-one inches and a half; from the sternum to the pubes measured eighteen inches and a half. The uterus was slightly prolapsed, and the uterine sound passed to a distance of two inches and a half. Owing to the extent to which the breathing had been embarrassed by the tumour, the patient had not been able to lie in bed for three weeks. She had not been tapped.

The operation was performed under the influence of bichloride of methylene. After the abdomen had been opened in the usual manner, the bleeding which occurred from the vessels in the cut surfaces had been arrested, and

the peritoneum divided, the right cyst came into view and was tapped. The fluid was dark-coloured and grumous. A second cyst was then tapped, and about three pints of a similar fluid were drawn off. Traction on the collapsed cysts having brought them outside the abdomen, a third came into view. This was drawn through the wound without being punctured, as well as a number of other smaller cysts. The pedicle, three inches long and an inch broad, connected with the left ovary, was secured by a clamp, and the tumour was then separated. The wound was brought together and dressed as in the previous cases. The sutures were all removed by the seventh day, the clamp came off on the eleventh day, and her recovery was uninterrupted from this time.

CASE 5. *Removal of a multilocular ovarian tumour weighing forty-six pounds; firm adhesions; use of clamp; recovery.*—Belinda H——, aged thirty-three, had had four children. The swelling commenced two years and eight months before admission. Eighteen pints of fluid had been removed by tapping three months previously. The abdominal walls were very tense, and fluctuation was very distinct. In the left iliac region was a solid substance which was very painful on pressure. There was considerable œdema of the abdominal parietes, both lower extremities, and the lower part of the back. No albumen was found in the urine. The girth at the umbilicus was forty-eight inches and three-quarters, and, from the sternum to the pubes, measured twenty-three inches. The uterus was lower in the pelvis than normal, and the cervix was directed towards the left side. The uterine sound passed to a distance of four inches and a half. The uterus was mobile.

Ovariotomy was performed under the influence of bichloride of methylene. The tumour was exposed by an incision three inches in length. There were firm adhesions between the tumour and the abdominal wall, which were with difficulty broken down. A cyst was then tapped and the fluid removed, and another cyst was emptied. The hand was then passed into the abdomen, and some firm adhesions which existed in the iliac and lumbar regions were broken down. Other adhesions above and behind were next separated. The incision was then lengthened upwards by one inch, and the tumour having been brought outside, some omental adhesions were detached, and the pedicle (about three inches in length) connected with the left ovary was secured with a clamp and divided. The cyst-walls were so friable that in bringing out the tumour one of the unemptied cysts adherent to the abdominal wall gave way, and the contents flowed into the abdomen. A great deal of time was spent in clearing out the cystic fluid and blood from that cavity. The wound was brought together by five silk sutures.

This patient had not a single unfavourable symptom. The wound, except where the pedicle issued, was healed on the fifth day; the whole of the sutures and the clamp were removed by the twelfth day; and the patient made a rapid recovery.

CASE 6. *Solid ovarian tumour; ascites; ovariotomy; fatal result.*—Susan R——, twenty-four, unmarried, first noticed the swelling two years before admission. She had been tapped about twelve months previously, and again in three months. The abdomen was tense and fluctuating, especially in the flanks, and was resonant in front to the right of the umbilicus. A distinct hard tumour could be felt superficially to occupy nearly a central position with the umbilicus for its centre, and to extend above, below, and slightly to the left of it. The girth of the abdomen was forty-two inches.

The tumour was firmly adherent to the diaphragm, omentum, and abdominal wall; a considerable time was required to separate the adhesions, and the pedicle, which was four inches long, narrow, and attached to the left ovary, was secured by a clamp, and the tumour separated. The ascitic fluid was then removed from the abdomen, and the wound closed with silk, as in the previous cases. At 4 P.M. the patient had somewhat rallied after the operation. Her pulse was 120; she complained of great pain in the abdomen, which was relieved by a morphia suppository. She passed a very restless night, and on the following morning her pulse was 125; she dozed occasionally; still complained of severe pain in the abdomen, and was ordered iced brandy and iced milk. At 9 P.M. her pulse was 130; the abdominal pain had increased; she was very restless, and complained of flatulence. At 9 A.M. on the third day her pulse was 130; vomiting began during the morning and she sank exhausted at 5 P.M.

At the post-mortem examination the peritoneum, omentum, and intestines were much injected. About three quarts of bloody fluid in the abdominal cavity; right ovary healthy; uterus much atrophied; remains of adhesions seen in the omentum, diaphragm, and abdominal wall. The tumour weighed 4 lb. 2 oz. The ascitic fluid weighed 20¼ lb.

(Under the care of Mr. WALTER WHITEHEAD.)

CASE 7. *Removal of multilocular ovarian tumour weighing twenty-five pounds; recovery.*—M. C——, aged fifty-nine, had been married thirty-seven years, and had borne seven living children and had two miscarriages. She first noticed an increase in the size of her abdomen about ten months before admission, but could not remember that it was greater on one side than the other. She also observed, about the same time, repeated blood-stains on her linen, as though she had been menstruating, although that function had ceased sixteen years previously. The circumference round the umbilicus was forty-one inches.

Ovariotomy was performed under the influence of the bichloride of methylene. The tumour was removed by a small incision; uniform and extensive adhesions to the parietes were broken down, several cysts of variable size were emptied and drawn out, the remaining mass of semi-solid matter and aggregation of small cysts were also drawn through the abdominal wound. The pedicle was secured by a clamp, and the wound closed by silk sutures. The tumour and contents weighed twenty-five pounds. The patient made a rapid and uninterrupted recovery.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 14TH, 1871.

DR. H. A. PITMAN, VICE-PRESIDENT, IN THE CHAIR.

ON THE OPERATION OF OPENING THE LARYNX BY SECTION OF THE CARTILAGES, &c., IN ORDER TO FACILITATE THE REMOVAL OF MORBID GROWTHS.

BY ARTHUR E. DURHAM, F.R.C.S.,

ASSISTANT-SURGEON TO, AND LECTURER ON ANATOMY AT, GUY'S HOSPITAL.

THE author related in detail five cases in each of which this operation had been performed in Guy's Hospital: in three cases by himself, in one by Mr. Bryant, and in one by Mr. Colley. The results in four of these cases had been eminently satisfactory, free respiration and good voice having been regained. The remaining case was still under treatment.

Appended to this communication were more or less complete reports of all the cases the author had been able to find on record. These cases were 32 in number, and with the 5 detailed in his communication gave a total of 37. In 19 of these the operation might be regarded as having been completely successful, natural respiration and voice (though in some instances not normal in tone) having been restored. In 7 partial success was obtained, respiration having been restored, but the voice lost or very seriously impaired. In 4 cases some temporary relief was obtained. In 3 the result might be considered negative, neither good nor harm having been done. The reports of at least 2 were incomplete. In 2 cases—and two cases only—death resulted. In each of these, however, the immediate cause was blood-poisoning. Metastatic abscesses were found in the lungs in the one case; in the other erysipelas and gangrene occurred, and broncho-pneumonia and exhaustive fever ensued, and led to the fatal issue.

Comparing the results thus stated with those given by Dr. Mackenzie in his Treatise on Growths in the Larynx, the author pointed out that death could properly be attributed to the operation in two only out of the nine cases enumerated by Mackenzie as having terminated fatally, these two being the same as those already alluded to. With regard to the other seven cases the author specified each, and showed that in each the result of the operation

was favourable, or, at any rate in no degree mischievous, and certainly not fatal.

Some of the difficulties liable to be encountered in the operation were then briefly discussed, and the opinion expressed that such difficulties were really fewer and more easily overcome than appears to be generally supposed. In conclusion, the author pointed out that it was not necessary to institute any comparison between the dangers and difficulties of this operation and those met with in the removal of growths through the mouth by aid of the laryngoscope; nor, indeed, was it at all fair to estimate the comparative merits of the two methods of proceeding by bare numerical statements of the results obtained. If, in any case, removal of the growth by aid of the laryngoscope should appear practicable, the idea of resorting to section of the cartilages could not be entertained until fair trial had been made of the minor operation. In very few, if any, of the cases on record in which the larynx was opened would it have been practicable to have removed the growths through the mouth. Indeed, in many instances numerous abortive attempts through the mouth were made before resort was had to section of the cartilages.

With regard to the chances of recurrence, there could be no doubt that the more completely the original growth was removed the less would be the probability of its reappearance. Neither could there be any doubt that such complete extirpation could be more certainly effected in in most cases after section of the cartilages than by any method practised through the mouth. Dr. Mackenzie's conclusions as to the comparative chances of recurrence, as affected by the method adopted, appeared to the author unfair and likely to mislead. Cases of cancer (a malady very likely to recur) were included in one, and excluded from the other, of the sets of cases between the results of which a numerical comparison was made.

Mr. BRYANT said that he rose to support the operation as the only possible curative means in the class of cases described. When the morbid growths were multiple, tracheotomy could be only a temporary measure, and evulsion through the mouth must be impossible. He enlarged upon the alleged erroneous character of Dr. Morell Mackenzie's statistics with regard to the fatality of the operation.

Mr. CROFT moved that the debate should be adjourned, in order to give Dr. Morell Mackenzie an opportunity of being present.

Dr. PITMAN said it was not the custom of the Society to adjourn a debate on account of the absence of a Fellow who might be interested in it.

Mr. HOLTHOUSE related the particulars of a case in which he had performed the operation described.

Mr. THOMAS SMITH inquired whether the laryngeal cartilages had been united by sutures in the cases described by Mr. Durham. He also called attention to the early age of the patients; and asked whether the disease were more common during childhood than in after life.

Mr. DURHAM replied that sutures were used to unite the cartilages; and that early age might be a reason for performing the operation, as it was more difficult to reach laryngeal growths through the mouth in children than in adults. He expressed much regret at Dr. Morell Mackenzie's absence; and said that, had he been present, he should have joined issue with him on one or two other questions also.

OBSTETRICAL SOCIETY OF LONDON.

NOVEMBER 1ST, 1871.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—Messrs. Eugene Goddard, Chas. J. Harris, John Faure Miller (Paris), F. T. Tayler, and W. Bezley Thorne.

Dr. SNOW BECK exhibited an imperfectly involuted Uterus, and gave a minute account of its microscopical characters; from which he concluded—(1) That the essential condition of the organ consisted in the elements of the different tissues retaining a portion of the natural enlargement consequent upon impregnation. But this enlargement was due more to the increased size and amount of the soft tissue present in the walls of the uterus as well as at the internal surface, than to the increased size of the contractile fibre-cells. (2) That although the bloodvessels were large and loaded with fluid blood, yet there was not any evidence to show that any morbid process, similar to inflammation, had at any time been present. (3) That the whole of the bloodvessels to the minute capillary network at the inner surface formed one continuous system, though the character of the distribution changed towards the inner surface. And, considering there is no division in the uterine walls to justify the description of an internal mucous membrane, this distribution appears to offer a strong argument against the idea that the internal surface can be the seat of inflammation independent of the other portions. (4) That the pulpy condition of the tissue at the inner surface, with the loaded state of the bloodvessels throughout, appear to afford a probable explanation of the frequent hæmorrhages which attend similar enlargements. (5) That with regard to any treatment for the removal of this condition, it would appear that this should include topical applications to the whole of the uterine cavities.

Dr. F. R. HOGG exhibited a Malformed Fœtus. Referred to a committee.

Dr. BARNES read an abstract of a memoir on "Osteomalacia," by Dr. Casati, of Milan. This disease is remarkably frequent in some of the rural districts surrounding Milan. During the eight years that the author had acted as assistant to the late Professor Lazzati, sixty-two cases of clearly marked osteomalacia were admitted into the Lying-in Hospital. Almost all the sixty-two women came from that part of Milan known as the Valley of Olona, the same district which also supplies the greatest proportion of cases of pellagra and of petechial typhus to the Milan hospitals. They all came from wretched villages, where food was scarce, consisting for the most part of maize or rice, often musty. Their houses were ill-ventilated, damp, and built upon clay. The drinking water was found wanting in saline matter. Twenty-seven of the women were delivered normally after easy labour, four had difficult labour, while thirty-one were delivered artificially, but only two required the Cæsarean section. For the medical treatment Casati recommends the use of the biphosphate of lime or of "bone powder," and cod-liver oil, and the substitution of Liebig's bread for bread made of rice and maize.

Dr. SQUIRE did not agree with the author that the pulmonary and bronchial congestions afforded any argument against the use of chloroform, since these depended on the mode of death, and in severe labours the use of chloroform tends to diminish the stress upon both respiration and circulation.

Dr. RASCH read a paper on a "Novel Method of using the Uterine Sound for Redressing a Flexed Uterus." The point upon which he particularly laid stress was that the part of the instrument inside the uterus should be kept steady in its place, and thus avoid the irritation which resulted from making a large semicircle of motion in the uterine cavity, according to the usual method. A sound introduced into the retroflexed womb with the point downward and backward, should be first used in that position as a lever to lift up the organ as far as possible. Then, instead of twisting the handle round and making the intra-uterine part swing round the ideal prolongation of the stem, the movement should be reversed, so that the part in the uterus and its ideal prolongation are made the centre of motion round which the handle and stem sweep in a large circle. The movement is well illustrated by grasping the curved part of the sound in one's hand, and swinging the handle round as it will go.

Dr. PHILLIPS fully appreciated the value of the method described by Dr. Rasch. He would, however, be glad to know the comparative frequency with which it was found necessary to use the sound for redressing the flexed uterus. Doubtless it could not be dispensed with in some cases, but he always attempted to restore a retroflexed uterus without the use of any instrument, and he believed that in a large proportion of cases this could be effected.

Dr. GUSTAVUS MURRAY could hardly admit that the method described by Dr. Rasch was new in principle. He had employed it for some years. In severe cases of flexion he was in the habit of introducing the sound in an easy manner, by passing it first in the opposite direction to the displacement until it reached the flexed point, and then, secondly, by turning the curve of the instrument in the course the fallen body of the uterus had taken.

Dr. AVELING and Dr. EDIS also said that they had practised the method. Dr. Edis said that Spiegelberg had recently called special attention to the danger resulting from injudicious use of the sound, and any method which lessened the risk from its use was worth considering.

Dr. CONRAD, of Pesth, read a paper on "Prolapse of the Female Genitalia," in which he maintained that the prolapse of the uterus is for the most part a secondary affection, a primary prolapse being very rare. Prolapse of the vagina is the most important part in any descent of the female genitals, and uterine prolapse is but a sequel of this, the prolapsed vaginal walls pulling down the uterus. Of the different forms of vaginal prolapse, that of the anterior wall is the most common, though frequently associated with prolapse of the posterior wall. A descent of the latter by itself is, however, rare. Should there be a considerable elongation of the cervix, we can certainly conclude that the vaginal prolapse was primary. The elongation of the vaginal portion of the cervix is of no diagnostic value, and is simply the result of mechanical irritation. Dr. Conrad believes it may be justly maintained that elongation of the supra-vaginal portion of the cervix and hypertrophy of the infra-vaginal portion are but secondary affections. The vagina alone is sometimes prolapsed without any descent of the uterus. The author then discussed the most important predisposing causes of prolapse—gestation, parturition, senile atrophy, &c. Prolapse in young girls occurs suddenly from a sudden shock through *contre-coup*. The replacement of a complete prolapsus of long standing should always be preceded by an emptying of the bladder and the rectum. The palliative treatment is best conducted by pessaries, of which the best is Meyer's ring, or Hodge's modification of it. For the radical cure, Dr. Conrad prefers Professor Spiegelberg's operation to any other. It consists of a combination of three operations. The vaginal portion of the cervix uteri, if greatly hypertrophied, is first removed by the galvanic wire. If the posterior wall of the vagina has become prolapsed with the uterus, he performs Dieffenbach's operation, by removing a triangular piece of the mucous membrane of the posterior wall, having its apex to the os uteri, and for its base either the pared surfaces of the rent perineum, when this has been ruptured, to form a new perineum, or where this has not happened, the labia minora, so as to contract the orifice of the vagina, and aid in supporting the anterior vaginal wall. Spiegelberg then proceeds to unite the upper portion of the posterior vaginal wall with the inferior anterior, according to Simon's operation.

Dr. EDIS thought the affection, on account of its great frequency, was too little studied. He had seen several cases where a pessary had been introduced, with the intention of keeping up an elongated cervix.

Dr. PHILLIPS agreed with the author of the paper that certain cases of prolapsus uteri were doubtless secondary to vaginal prolapse, cases in which the uterus was small, and which had been called instances of *passive* prolapse; but he believed that this class was a much smaller one than that which included those cases where an increased weight of the uterus itself was the primary cause of its descent. This was associated with the relaxation of the surrounding areolar tissue, and the heavy uterus was then sufficient to overcome the support which the vagina in the healthy state gave it by means of the strong bands of so-called areolar tissue inserted into its walls. The arguments brought forward by M. Huguier seemed to him conclusive against the view advocated by Dr. Conrad, that elongation of the supra-vaginal portion of the cervix was a secondary affection dependent on the traction made by the prolapsed vaginal walls. He doubted whether any shock would produce a displacement of the uterus in young women, if the organ was not increased in weight and there existed no impairment of the surrounding structures.

Dr. HEYWOOD SMITH said he agreed with what had just been said, that the chief cause of prolapsus uteri was an increased weight of the organ, producing relaxation of its supports. Another cause, however, was not generally recognised—viz., that as age advanced, the lumbo-sacral curve becoming more or less obliterated, the plane of the pelvis thereby becoming more horizontal, the natural support that the normal position of the pelvis, together with the abdominal walls, gave to the pelvic viscera was removed, and they tended to prolapse from gravitation. He suggested that the word "procidentia" should be held to signify the falling or tendency to fall, and that "prolapsus," being the past participle, and signifying the complete act, should be used only to indicate cases where the uterus was extruded from the vulva.

Dr. ROUTH believed that prolapsus uteri without elongation of the cervix was very rare. His own experience led him to agree with the conclusions arrived at by Dr. Conrad. Looking back at the operative measures which had been adopted for the relief of prolapsus, there were three chief methods which had been practised. First, the perineal operation, by means of which some cases were radically cured; in others, however, after some months the uterus dilated the external opening, and appeared external to the vulva. Secondly came Emmett's operation, or a modification of it as first practised by Dr. Rogers. This consisted in removing a very large triangular piece of mucous membrane (the apex being towards the cervix uteri) from the anterior wall, sometimes also from the posterior, wall of the vagina, and bringing the edges together by sutures. This operation also succeeded in some cases, though not in all. Thirdly came the plan of removing a portion of the cervix by the écraseur or actual cautery. This set up absorptive action in the uterus, and the elongation in many cases gradually but entirely disappeared. Dr. Routh thought that a cure, to be certain and radical, should comprise the three operations conjointly, or at any rate the last and one of the other two. He believed that any cause which produced a friction of the vagina on the cervix would produce allongement of the cervix.

Dr. BARNES said that for some years we had all been pursuing a tentative course to find out the best mode of treating these affections. As to the mode of production of hypertrophy, he was scarcely prepared to agree with Spiegelberg and Dr. Conrad. The traction of the vagina might come in as a factor in the course of the disease, but the initiatory stage was, he believed, congestion and increased weight of the uterus. These cases were rare in women who had not borne children; they almost all began after childbearing. The passage of the child through the cervix was a violent process: the cervix was forcibly stretched open; the mucous membrane was carried down before the head; the tissues of the cervix were bruised; small vessels were torn. Then, from getting about too soon and other causes, imperfect involution resulted; the lower part of the uterus especially was increased in weight and bulk, whilst the surrounding cellular tissue, having been greatly stretched and weakened, was less able to support the uterus. Hence continued congestion and a perverted nutrition of the cervix. Small polypi on the edge of the os frequently complicated hypertrophy. Their structure was identical with that of the cervix from which they sprang. Dr. Barnes could not help thinking that simple prolapsus was far more frequent than Dr. Routh's observations would indicate. He would, in conclusion, like to know how far the experience of others agreed with his own as to the usual extent of elongation being exactly five inches. He had found the cases in which this length was exceeded very rare.

Mr. SPENCER WELLS differed from Dr. Barnes in the opinion that restoration of the perineum was beginning at the wrong end in the treatment of prolapsus of uterus and vagina. It is quite true that prolapse of the anterior wall of the vagina is the first step in the progress downwards. But a sound perineum is the chief opponent to this prolapse. It would be absurd to expect the perineal operation to cure an elongated cervix, but in cases of ordinary prolapse he could say that the perineal operation often effected permanent cure. He had never seen an elongated cervix grow again after the vaginal portion had been removed.

The PRESIDENT said that when the uterus, from whatever cause, descended, it, by its pressure on the vagina, acted like a foreign body, and set up reflex irritation and tenesmus, which, acting constantly, coupled with defecation and the pressure of the bladder, would tend to extrude and elongate the cervix. It would clearly be better, before attempting any plastic operations, to endeavour to gain shortening of the uterine supports, either by pessaries or recumbency.

THREE cases of Asiatic cholera are reported as having proved fatal at Halifax, Nova Scotia; the disease having been introduced into the country by the steamer *Franklin*, from the Baltic.

Reviews and Notices of Books.

Anæsthesia; Hospitalism; Hermaphroditism; and a Proposal to stamp-out Small-pox and other Contagious Diseases. By Sir JAMES Y. SIMPSON, Bart., M.D., D.C.L., late Professor of Midwifery in the University of Edinburgh. Edited by Sir W. G. SIMPSON, Bart., B.A. Edinburgh: Adam and Charles Black. 1871.

THE strange mixture of matter indicated by the title of this book forms the second volume of the works of Sir James Simpson, and is edited by the present baronet. Here, as with the contents of the first volume, we find ourselves on familiar ground, inasmuch as all the subjects treated of in this book have been already before the professional world in various forms, and the views enunciated by the author have been sharply criticised within the memory of the present generation. The history and defences of anæsthesia remind us of the manifold controversies connected with the introduction of chloroform, and of the many conflicts among those who claimed credit for its discovery. Hospitalism brings up again before us, as an affair almost of yesterday, the animated and superlatively energetic discussion that took place between the late Baronet and Mr. Holmes; and the contents of this volume include, we think, all that passed between those able writers on the subject. Hermaphroditism is, perhaps, a subject of less general interest to the bulk of the profession, but the lecture upon it is most valuable as a complete *résumé* of this celebrated author's experiences. A short paper at the end of the book, occupying ten pages only, is devoted to observations having reference to the stamping out of contagious diseases, and was written a few months only before the author's death. It contains a most valuable series of notes that show how these diseases kill, and gives a clear exposition of the writer's views as to the proper modes of prevention.

We say of this as of the first volume, that it should find a place on the table of every practitioner; for though it is patchwork, each piece may be picked out and studied with pleasure and profit.

A Handbook of Therapeutics. By SIDNEY RINGER, M.D., Professor of Therapeutics in University College, and Physician to University College Hospital. Second Edition. pp. 483. London: H. K. Lewis, Gower-street. 1871.

THE second edition of this work has been very carefully revised, and we are glad to welcome it in its present form. The plan of the work is very well known; it is that followed by Buckheim, and we need not, therefore, specially refer to it. We propose to make some comments upon the novelties contained in the present issue. The object in every case has been to give very precise details of the symptoms indicating the use of a drug, and to afford full directions concerning the method of administration, special stress being laid upon the relative advantages of small doses on the one hand, and large doses on the other, in reference to particular cases. The work dwells, we should add, with special minuteness on the treatment of disorders of children, and Dr. Ringer's opportunities for acquiring this kind of information have been, of course, very large. There is a very good section devoted to the action of the sulphur compounds, and the author mentions how greatly these substances will modify boils and carbuncles, which may be dispersed by the remedy in their early stages, and when matter is formed, the surrounding inflammation appears to be limited in extent by the sulphides. These remedies likewise hasten the maturation and the passage of pus to the surface. The sulphides, moreover, are said to augment the suppuration, and so greatly reduce the deformities in the case of scrofulous and tuberculous glands. They are also declared to be most useful in onychia, and in scrofulous sores generally.

The subject of baths in disease is one to which attention is just now specially directed, and we find Dr. Ringer giving a good deal of precise information on this subject. He speaks highly of the sulphides in baths in chronic skin diseases, we observe. The sea-bathing directions are very minute. The reader will find a good deal of original matter on the action of acids and alkalies, and the treatment of diarrhœa, especially in children, and in reference to counter-irritation. Dr. Ringer endorses Dr. Lyons's strong recommendation of capsicum in dipsomania. Ten-drop doses of the tincture, or twenty grains in powder in the form of pill, obviate the morning vomiting, remove the sinking at the pit of the stomach, the intense craving for stimulants, and promote appetite and digestion. It should be taken just before meals, or whenever depression or craving for alcohol arises. It also induces sleep in the early stages of delirium tremens.

It is a new fact to us that lobelia can be taken by children in large doses without any toxic effect, and the author praises its action in whooping-cough in the spasmodic stage, and in uncomplicated cases, in ten-drop doses for a child two years old, given every hour, with another dose when a fit of coughing is imminent.

These remarks may suffice to show that the work has been much added to. We do not always agree with the author, but on the whole we can speak very highly of the volume in its present form as a most useful and handy book to the practitioner and student.

The New Sanitary Laws—namely, the Public Health Acts, 1848 and 1858, and the Local Government Act, 1858; with an Appendix, containing various Statutes referred to in the above and incorporated therewith, as well as those which have since been enacted. By G. W. LUMLEY, Esq., LL.M., Q.C.; and E. LUMLEY, Esq., B.A., Barrister-at-Law. London: Shaw and Sons.

IF any argument were needed for a thorough revision and consolidation of our sanitary laws, it would be afforded by a perusal of Mr. Lumley's book. Since our first attempt at sanitary legislation, no less than fifteen Acts of Parliament have been passed, besides others applying either to Scotland or Ireland or to the metropolis alone. Besides these there are many Acts for special purposes bearing most materially on sanitary interests, which, although not to be reckoned as part of general sanitary legislation, have in reality sprung from anxiety for the public health—as, for example, the Burial Acts, the Factory Acts, Acts for Promotion of Baths and Washhouses, the Reduction of Overcrowding, the Adulteration of Food, the Prevention of Smoke, &c. It was, indeed, no light task to undertake to arrange this confused mass of sanitary legislation in a comprehensive form. This, however, has been fairly done by Mr. Lumley, and we have no doubt that all officers engaged in the administration of our sanitary laws will find it a most useful text-book. In the public interests, however, we may hope the present confusion will soon be a thing of the past, and that the Government will really give attention to a matter which affects so deeply the lives and general happiness of the nation.

MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS, IRELAND.—The following have been appointed office-bearers for the ensuing year:—President: Alfred Hudson. Council: Loombe Atthill, Thomas John Banks, Thomas Fitzpatrick, Thomas W. Grimshaw, Samuel Gordon, Thomas Hayden, George Johnson, Henry Kennedy, Robert Law, Jas. Little, Alfred McClintock, and William Moore. Honorary Secretary: H. Eames.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 25, 1871.

THE ETHICAL FUNCTION OF THE CORPORATIONS.

When the Medical Act Amendment Bill was under discussion by the General Medical Council, and fears were entertained that the new licence in medicine which it contemplated would render medical men entirely independent of the existing medical corporations, it was argued that it was of great importance that the relation now subsisting between members of the profession and the various corporations with which they are affiliated should be continued. It was maintained that these various bodies had a certain authority over their members which tended to deter them from unprofessional courses; and there was certainly some plausibility in the argument. One would expect that the very fact of men passing scientific examinations and receiving diplomas from the great medical corporations would operate powerfully in making them careful of their ethics and scrupulous as to the means by which they succeeded. And such is undoubtedly the general fact. Men who have had a scientific training, and who hold a British diploma or degree, do, as a rule, act with the dignity and independence of scientific men. But our columns almost every week contain lamentably sufficient proof that there are many violations of this rule—that a few members of our different colleges endeavour to procure patients very much as a small tradesman endeavours to procure customers, by advertisement through the medium of newspapers or handbills, of which we publish specimens to-day. We do not at present allude to the very flagrant cases which are now and then reported to us of men violating all sense and delicacy and respect for their order in the pamphlets which they publish, and still having their names retained on the roll of one or other of our great licensing bodies. This is a circumstance which we do not pretend to explain. But there is something in the very audacity of such extreme cases which carries with it its own punishment. We rather have in view now the more common case of men who, in more quiet and less audacious ways, drift, sometimes from the force of circumstances and sometimes from the force of nature, into ways which we need not further specify, but which are undignified and unprofessional. Now we maintain that, in the interest of such persons themselves, it is desirable that the College with which they are connected should give them, in the first instance, a friendly intimation that in its opinion such and such courses are contrary to the spirit or letter of the diploma held by them and the bye-laws of the institution from which they hold their licence to practise. There can be little doubt that the law contemplated that the corporations should maintain such terms with those holding their diplomas as to make communications of this kind easy.

Our principal licensing bodies have pretty distinct powers of censuring and punishing those who act unprofessionally. The 17th section of the Bye-laws of the Royal College of Surgeons of England has reference exclusively to the misconduct of Fellows and Members, and clearly provides for the punishment of indecent advertisements, of fraudulent personations, criminal offences, and other such serious matters. But the second paragraph of this section seems to give the College power over lighter offences, and to be purposely couched in more vague language. It runs thus:—

"No Fellow or Member of the College shall advertise or publish any matter or thing prejudicial to the interest or derogatory to the honour of the College or disgraceful to the profession of surgery; and any Fellow or Member who may in any manner offend herein shall be liable to removal by resolution of the Council from being a Fellow and Member or a Member of the College."

The College of Physicians we all know has a Board of Censors and a carefully-drawn statement of the duties and conduct of Fellows, Members, and Licentiates, and the penalties for neglect or infringement of the statutes, bye-laws, or regulations. In this statement it is provided, for example, that no Fellow or Member of the College shall officiously, or under colour of a benevolent purpose, offer medical aid to, or prescribe for, any patient whom he knows to be under the care of another legally-qualified medical practitioner; also, that if it shall at any time appear or be made known to the President and Censors that any Fellow, Member, or Licentiate has acted *in any respect in a dishonourable or unprofessional manner*, &c., the President and Censors may call the Fellow, Member, or Licentiate so offending before the Censors' Board, and, having investigated the case, may admonish, reprimand, or inflict a fine not exceeding £10. This is independent of provision for expunging from the lists those who have been guilty of graver offences. Most of the bodies, excepting perhaps the Apothecaries' Company, are possessed of similar powers. It may be fairly asked,—Have they been properly used? If they had been but slightly used, should we have so many complaints of unprofessional practices as reach us from week to week? The College of Physicians, we believe, is more careful in this matter than the sister College; but, unfortunately, it has but a limited constituency. Let us hope that it will soon have a larger one, and that the College of Surgeons will make its judicial functions to be felt a little more by those of its members who seem to forget the distinction between a profession and a trade.

We should be the last to advise any frivolous or inquisitorial use of the judicial functions of our great licensing bodies; but when the circumstances are an obvious scandal and a discredit, it is right that those functions should be exercised, and the disuse of them is a neglect of duty. It would be seldom that extreme courses would be necessary. An interview or a written remonstrance would suffice in nine cases out of ten. If our corporations would demonstrate that they have a real interest in the profession and in what concerns its reputation, they must show themselves less indifferent to the unworthy courses of men holding their diplomas. It is due to the profession at large, which is dishonoured by such courses; and it is due to the erring members of the different corporations that they should receive gentle but firm correction from the bodies to which

they look as to their authority in professional matters. It is no mean service for a corporation to render to one of its straying members gently to recall him to right ways. And it is the extreme apathy of the corporations which has made medical men feel as if all those bodies cared for was to receive their fees.

DR. DRUITT, as President of the Association of Medical Officers of Health, has rendered them a signal service in drawing attention to their position and prospects. The consolidation of the Central Board is only the beginning of a great reform; and the same consolidation must be effected locally before sanitary organisation will be complete. The present position of medical officers of health is by no means satisfactory. Their information is almost all obtained at second-hand: their knowledge of the mortality is derived from the registrar, and their information regarding sickness from parochial medical officers. In the latter case the information is not given by fellow-servants, and the co-operation is friendly, personal, and voluntary, rather than official and necessary. Nor is the position more satisfactory in the Sanitary Department properly so called. The inspector of nuisances is often independent, and there is a tendency to set up his own dignity in opposition to the medical officer of health. Dr. DRUITT very properly observes that it is the bounden duty of the medical officer of health to make himself acquainted, by personal inspection, with the nature of the house accommodation of all classes; but, having this knowledge, which may enable him to check any information brought him, he need not be subject to the fatigue and loss of time requisite for personal inspection in every case of illness. For example, in a case of diarrhœa, the preventive and curative remedy ought to go together. With the medicine for the diarrhœa should go the packet of disinfectants. It should be the duty of the curative officer to see that the disinfectants are properly applied, and that instant notice of the case is given to the medical officer of health. The object of such a union of duty is to save labour and time, and to hinder two people from going over the same ground.

Dr. DRUITT proposes that the Poor-law medical officers should be called "curative civil surgeons;" that they should act under the medical officer of health, though not in an invidious sense, the status and pay being both increased. And the recommendation of the Royal Sanitary Commission is a good one—that they should be endowed with the powers of inspectors of nuisances to visit and report upon them without special authorisation. The functions of the medical officer of health should be of a higher and more varied character. It is to him that the public should look for statistical information as to the public health. He should initiate and carry out legal proceedings; inquire into uncertified deaths; act as the substitute of the coroner; report on epidemics affecting animals; test food, gas, and water. And although either pathology or physical science will do as a basis of education for the duties, brains are really the foundation of success. Dr. DRUITT thinks it would be limiting the choice of superior officers too much if all degrees of private practice were disqualifications. In former times Sir JAMES CLARK was parochial medical officer of St. George's, Hanover-square; and whoever desires the public to have the services of the best men will not be too ready to elect a practitioner to an infirmary or dispensary and then debar him from private practice.

Whilst most of these very admirable suggestions have appeared in a more or less isolated form, it is due to Dr. DRUITT to say that he has made a very hopeful attempt at reducing them to shape. As Dr. DRUITT says, he has no longer a personal interest in the matter; and we feel sure his advice will be received with the respect which it deserves.

THE discovery by KOWALEWSKY of the existence of a structure similar to that of the chorda dorsalis in Ascidians during a certain period of their development, and the consequent important connexion established between the Mollusca and the Vertebrata, has led to a considerable number of researches being undertaken upon the same point by various observers, which have been recently noticed by M. BOLL in the *Centralblatt*. KOWALEWSKY'S researches were undertaken chiefly upon Thallusia mamillata and Ascidia intestinalis. The Ascidians, it may be premised, are true hermaphrodites, being capable of self-fertilisation. KOWALEWSKY applied semen to ova taken from the same individual, and found that about an hour after the artificial impregnation had been accomplished cleavage commenced in the latter. The ova are somewhat complicated in structure, consisting of a vitellus surrounded by a gelatinous layer containing yellow cells, and the whole invested by a thick, hard capsule. The remarkable peripherically situated yellow cells proceed from the ova-bearing follicle, and subsequently form the mantle of the animal. The central cells of the mulberry mass break down, and a cavity (Baer's or the segmentation cavity) is formed, so that the embryo now appears as a hollow ball. A flattening takes place at one part, and an involution here occurs, giving the mass the form of a cup. The border or mouth of the cup contracts, forming the anus. The interior of the cup forms the cavity of the intestine, and the space between the inverted cup and the general integument forms the perivisceral cavity. Whilst these changes are going on, other processes are also occurring which indicate the relationship of the Ascidians to the Vertebrata. Upon one side of the embryo, but only at the fore-part, two dorsal ridges or laminæ appear, which ultimately unite in the middle line, and thus form a tube for the nervous system running parallel to the intestinal tube. This nerve-tube is only visible in the anterior part of the embryo. Posteriorly it disappears; and here a cord makes its appearance between the intestine and the wall of the body, composed, like the chorda dorsalis, of large cells, from which the tail of the larva is developed. The nerve-tube becomes more spherical, and a temporary development takes place of organs within the tube that seem to represent the eye and ear. In the meanwhile the chorda dorsalis develops backwards, presents indications of segmentation, which soon however disappear, and the cells fuse into a hyaline mass, upon which NOGINE, in a memoir not yet published, is stated to have discovered a series of ganglia. The chorda forms the axis of the tail, which atrophies within a few hours after the escape of the

embryo from the egg. The intestine grows forward in front of the great nerve-mass, and opens on the dorsal side of the body, its anterior part fusing with the body-wall, and dilating to form the branchial cavity.

The remarkable points of resemblance between the development of Ascidians and of the Vertebrata, it will be seen, consist—first, in the formation of the dorsal laminæ and their coalescence to form a nerve-tube; secondly, the presence in the body of two parallel tubes, of which the lower is the intestinal tube and the upper the nerve-tube; and, lastly, the possession of a chorda dorsalis. The more recent researches of KUPFFER, of METSCHNIKOFF, and of GANIN, essentially agree with those of KOWALEWSKY. DÖNITZ, however, who has been chiefly engaged with the development of the Clavelina lepadiformis, strongly opposes many of the statements of KOWALEWSKY, especially in regard to the nature of the so-called chorda dorsalis and the development of the primitive organs. It is, of course, possible that the discrepancy may be attributable to specific differences in the animals examined.

IF we were called upon to select a single descriptive epithet for Mr. WYATT, we should probably linger long upon the word "irrepressible." The title of the Surgeon-Major of the Coldstream Guards to occupy the position of representative of military surgery in this country is surely a self-constituted one. No event of which surgery takes cognisance can happen, however deplorable in its character and issues, but Mr. WYATT improves the occasion. His last achievement has been suggested by KELLY'S trial for murder, and by the attempt made by Mr. BUTT to throw the burden of TALBOT'S death upon the shoulders of the surgeons who attended him. Mr. WYATT thereupon wrote to *The Times*, and urged the desirableness of a better system of instruction in the surgery of gunshot wounds. To most people it would appear simply an impertinence to supplement an opinion expressed by the leading surgeons of England by a letter which, in reality, contains nothing at all beyond an implication that our hospital surgeons are unqualified to pronounce any judgment in regard to gunshot wounds. Some of the elders whose alleged shortcomings Surgeon-Major WYATT desires to expose have not scrupled to meet him before the tribunal to which he appealed, and have truly asserted that the surgery of gunshot wounds is taught to all who will learn, and that NÉLATON'S probe is as well known as ASSALINI'S forceps. An official of the College of Surgeons has also vindicated in print the action of that body in the matter. We, however, as medical journalists, cannot acknowledge the tribunal; for we think the question is one that can only be rightly appreciated by those who are engaged in the work of medical education. We may say, however, that experience is opposed to Mr. WYATT'S suggestion. After Waterloo, an Edinburgh surgeon named THOMSON went to Brussels, and on his return he commenced an agitation for a better teaching of military surgery. He had sufficient interest in high places to obtain a State endowment for a chair in the University of Edinburgh, and of this chair he was the first occupant. He was succeeded by a retired Indian surgeon, Mr. BALLINGALL, who was afterwards knighted, and who enjoyed a long tenure of office, which, on the whole, did not afford any conclusive evidence of the practical utility of the professorship. He, again, would probably have been succeeded by MACKENZIE, but for his untimely death after the battle of the Alma; and, when Netley was founded, the vacant chair at Edinburgh was suppressed, and its State endowment was withdrawn. Professor LONGMORE then became the official head of English military surgery, and the teacher, *par excellence*, of those to whom any special knowledge of gunshot wounds is necessary. But what makes Mr. WYATT'S letter especially uncalled for is the fact that we were engaged in a great war seventeen years ago, and that the excessive strain then thrown upon the Medical Department of the Army rendered it necessary for the Government to seek the aid of civil surgeons. Many young men of the highest promise responded to the call; some who then occupied, and more who have since attained, the position of surgeon to some one of the great metropolitan hospitals. There is scarcely a school of medicine in London that has not a Crimean man among its surgical staff; and the experiences of that sad time are such as will live for ever in the memories of those who shared them. There is no fear that its surgical lessons will be forgotten, or that, so long as some of our most active teachers remain in their present vigour, there will be any lack of instruction about gunshot wounds in our civil hospitals. Even if there were, we know of no special grounds, and of no professional position, by which Mr. WYATT is entitled to assume any leadership either in the demonstration or in the supply of the deficiency; whilst his statements relative to the connexion between septicæmia and injuries of the sciatic nerve have not raised him in the estimation of scientific members of the profession.

Medical Annotations.

"*Ne quid nimis.*"

THE FELLOWSHIP EXAMINATION.

WE almost fear lest the examiners at the College of Surgeons should address us as the boatswain's-mate did the sailor whom he was flogging, "Hit high or hit low, there's no pleasing you!" Nevertheless, we must follow up our complaint of "high hitting" in May last, by a suggestion that the paper set on Saturday last for the examination in Anatomy and Physiology for the Fellowship of the College was absurdly low. The first question required simply a description of the anastomoses of the branches of the cœliac axis and two mesenteric arteries; and the second a description of the white corpuscles of the blood—questions to which any sharp first-year's man ought to have been able to give satisfactory answers at the end of his first winter. The third and fourth questions, requiring the dissection of the glosso-pharyngeal nerve and a description of the cochlea, were more up to the mark, though the former only gave an opportunity for displaying a really practical knowledge of anatomy as gained by dissection.

We are quite aware that the paper forms only a part of the examination, and that the *viva voce* examination may be made to supplement the paper very satisfactorily. But

then it must be remembered that the paper is the only test which is public property, and that it is by the papers alone that the value of the examination is judged. What we complain of is the *uncertainty* of the College examinations. There seems to be no fixed standard, for sometimes excessively difficult and at others absurdly easy papers are set, and consequently the examinations lose the *prestige* which attaches to those at which a uniformly high standard is maintained.

We hold the recent paper to be easier than many papers which have been set for the Membership, and that to allow third-year's men to qualify for the Fellowship by passing such a test has a direct tendency to lower the value of the Fellowship as a professional degree. Whatever leniency may be rightly shown to candidates who have been many years in practice, there can be no need for such treatment of the juniors; and we again protest against the system of setting the same paper for two very different classes of candidates.

SUMMER DIARRHŒA.

A FEW weeks ago we sought to awaken the minds of the profession and the public to the exceeding importance of the heavy diarrhœal mortality which prevails during the summer months, chiefly among our infantile population. The Registrar-General's last Quarterly Return contains a number of striking facts in reference to this matter, which may be usefully studied in conjunction with our former remarks. June, this year, was remarkably cold, and July was somewhat less warm than usual, but August was so exceptionally hot that its mean temperature of 64·8° was only equalled or exceeded on four occasions during the last 100 years. The effect of this heat was shown in the rapid increase of diarrhœal mortality from the beginning of August until it reached a maximum about the end of the month, continuing excessive all through September. Comparing the last summer with that of 1870 we have these results:—Diarrhœa was, this year, less fatal, taking England and Wales as a whole, and so it was in fifty considerable towns of the second magnitude; but in the seventeen largest towns the disease was more fatal this year. In London the highest summer mortality from diarrhœa during the last eleven years was recorded in the memorably hot summer of 1868, when the deaths were equivalent to an annual rate of 4·0 per 1000; the rate last quarter was 3·8 per 1000, there being a difference of 3 degrees in the mean temperature of the two quarters. The influence of meteorological conditions in developing or checking diarrhœal attacks deserves to be closely and exhaustively studied; but this we can hardly look for on a sufficiently comprehensive scale until a system of national sickness returns is established, as there are obvious reasons why the death-registers are insufficient for the purpose. It may be interesting to note, however, if merely for the purpose of confirming a conclusion long since arrived at by Dr. Ballard respecting the relation between heat, drought, and diarrhœa, that five summers of highest diarrhœal mortality in London, yielding an average annual death-rate of 3·6 per 1000, have been coincident with an average mean temperature of 61·3° and a rainfall of 6·3 inches, while a five years average summer diarrhœal death-rate of 2·4 per 1000 has coincided with a mean temperature of 59·5° and a rainfall of 7·2 inches. Of the seventeen largest towns, Wolverhampton experienced the lowest diarrhœal mortality this summer, Leicester the highest, the extreme range being from 2·5 to 10·8 per 1000; Salford comes next to Leicester in order of highest fatality of the disease, then Manchester, Leeds, Sheffield, Liverpool, Nottingham, Birmingham, Norwich, and Bradford, where the rate was 5·3 per 1000.

IRISH GRATITUDE.

WHEN an Irish surgeon of good repute in his own country, and the inheritor of a great name, but whose professional qualifications are not yet many years old, and whose fame has hitherto been little spread abroad, was lately accused by a barrister of having killed a patient by his malpraxis, and was rendered by the circumstances of the case an object of very general criticism and attention, some of his professional brethren in London, much his seniors in years, and much his superiors in professional standing, were actuated by a generous impulse to bear witness to their sense of the injustice of the accusation. They sent to the general press a letter in which they expressed full concurrence in the treatment that had been pursued; and they were universally recognised as speaking, and as being collectively entitled to speak, in the voice of the whole profession. Their testimony was rendered all the more graceful by being spontaneous, by being the unsolicited act of men who saw that wrong was being done, and who came forward to protest against it.

The *Irish Times*, however, has since contained a letter signed "A Dublin Surgeon," the writer of which treats the London testimonial as a piece of impertinence—as an "uncalled-for assumption of superiority." The writer forgets that people do not need to assume what they possess; and that the names of Sir William Fergusson, and Sir James Paget, and Mr. Prescott Hewett simply *convey* superiority, when they are placed in the same category with that of a gentleman who has been only a few years in the profession. Mr. Stokes must be a far less able surgeon than we had supposed, if he does not personally highly value an opinion expressed by men who are not only the acknowledged heads of the profession in England, but whose reputations are co-extensive with civilisation. His anonymous friend may possibly fear that the testimonial may swallow up Mr. Stokes altogether; and that, just as there is here and there a man known as Mrs. So-and-So's husband, so Mr. Stokes may only be remembered as the surgeon whom Sir William Fergusson and his co-signataries defended. The letter, besides its ingratitude, has another unpardonable fault in its vulgarity. From its commencement to its signature it is defaced by the indelible marks of the latter. It is one among many other signs which show that, as in France, so in Ireland, the days of high breeding and of gentlemanly feeling are passing away, and are giving place to a time in which self-assertion is accepted in lieu of merit, and in which bluster is thought more dignified than courtesy. We trust the Dublin surgeons, as a body, will promptly disavow the scribbler who has thus dragged them into the mire.

THE RESIGNATION OF DR. ELLIS.

IT seems to be universally agreed that the resignation of Dr. Ellis was necessary to put an end to the scandals which have so long disgraced the parish of St. Pancras. We have carefully abstained from entering into the merits of the case. We believe that great errors have been made on both sides. Dr. Ellis has for a long time past occupied an unenviable position—one, in fact, in which it was quite impossible for him to do his duty with any comfort or satisfaction; whilst the prejudices and personal remarks in which some of the guardians have indulged have helped only to reveal their incapacity. Dr. Ellis is exonerated from the very serious charges made against him, but he is censured for matters which came out incidentally, the real fact being that an excuse was wanted for putting an end to the state of discord which has for so long prevailed.

It is important for the profession to note that in a

quarrel between guardians and their medical officer the latter will always in the end be sacrificed. The Local Government Board can neither dismiss the guardians nor permit personal quarrels to interfere with the proper administration of the law. We believe the true remedy for this unsatisfactory state of things to be the appointment of visiting medical officers in lieu of residents. The non-resident medical officer will not be so directly subject to the interference of guardians, and will not be so dependent on their good will. The guardians, on the other hand, will not have it in their power to annoy the medical officer; they will be bound to respect his opinion and advice, because he is supported by his friends and patients outside.

It is absurd to suppose that there is the same need for resident medical officers as in a hospital, to which grave accidents may at any time be brought. The most urgent case is probably one of apoplexy in some pauper of eighty years of age, and the delay in sending for the doctor living a street or so away is not greater than the ratepayers are obliged to submit to.

The South Dublin Union has a staff of four visiting physicians for a less number of patients than are found in St. Pancras, and nobody ever heard of any quarreling; indeed, we venture to think that in such a case the guardians would certainly get the worst of it at the next election. Proper division of labour is the secret of good administration, and we believe that the work of these workhouse infirmaries will always be better and more economically done by one visiting attendant to every fifty or sixty patients rather than by giving over some five or six hundred into one charge.

MODEL CHOLERA HOSPITAL ON THE TYNE.

AN official visit has just been paid by Mr. J. Netten Radcliffe, one of the inspectors of the Local Government Board, to Newcastle-upon-Tyne, for the purpose of inspecting the new floating cholera hospital for the Tyne; and we are enabled to state that this hospital is a remarkable success. It will be remembered that at the meeting of the different sanitary authorities on the Tyne, from Newcastle to Tynemouth, ten in number, some three months ago, Mr. Radcliffe recommended these authorities to have nothing to do with discarded hulks of big vessels for hospital purposes, but to construct their own hospital, and to construct it by flooring barges, connecting these by a platform, and building upon the barges thus floored proper hospital huts, with necessary appurtenances. The suggestion was eagerly seized by the then Mayor of Newcastle, Mr. R. Burdon Sanderson, and by the committee appointed for construction. This Committee have worked with a will, aided by their medical officer, Dr. Bramwell, of North Shields, and the result is a hospital so admirably adapted to the wants of many of our ports that we hope it will become a model extensively followed. The Committee picked up the disused hulk of a large ferry-boat, and on this hulk has been built a wooden hospital hut, constructed on the most approved principles, with all modern appliances for hospital needs (including hot water and bath arrangements)—constructed, in fact, according to the principles laid down in the "Memoranda on Hospital Accommodation to be provided by Local Authorities." The hut measures 43 ft. long, 23 ft. wide, and has a mean height of 14 ft. It is lighted by six capacious windows on each side, is well ventilated, and is warmed by an open stove in the centre. At one end are necessary offices, at the other a room for the head nurse. Below in the hulk of the vessel are the kitchen, store-rooms, and most comfortable accommodation for the ship-keeper and his wife, and the nurses, including even a mess-room. By the side of the hospital will be moored a keel, on which are being erected a disinfecting apparatus, laundry, and additional sleeping or other rooms. The arrangement of the whole reflects the highest credit upon the Committee, their medical officer (Dr. Bramwell), and the borough surveyor of Newcastle.

Although the hospital is built for a special purpose, it is a model of a floating hospital (particularly for smaller ports and some river ports) for infectious diseases. Dr. Bramwell suggests that, when the cholera epidemic has passed away, a smaller hut should be built for infectious diseases, and the larger hut maintained for general affections. The suggestion, if carried out, would give to the Tyne, for the use of its shipping, the most complete permanent floating hospital in England. The cost of the whole hospital (the hull of ferry-boat having been given) is about £1200, and this will be liquidated by a rate of one farthing in the pound on the rateable value of the ten local authorities, with one-eighth of a penny in addition to keep the Committee in funds.

TERMINATIONS OF NERVES IN THE VAGINA.

A PAPER has recently been read before the Imperial Academy of Sciences of Vienna on this subject, by M. Chrschtschonovitsch. The animals examined were man, the rat, dog, and rabbit, the last being by far the best adapted for demonstrating the relations of the finer branches of the nerves. The mode of preparation consisted in placing strips of the membrane, removed immediately after death, in a one-half per cent. solution of chloride of gold for about half an hour. The fragments were then washed for from twelve to twenty-four hours in distilled water, after which they were transferred into a nearly saturated solution of tartaric acid, which may be gently warmed. The almost black specimens were now hardened in alcohol for two or three days, and then imbedded in a mixture of wax and oil. Sections were made in various directions, and examined with the aid of glycerine. It will be seen that this mode of preparation nearly coincides with that given in a late number of this journal, as recommended by Dr. Klein, and which, from personal inspection of the sections, we can pronounce to furnish excellent results. The mucous membrane of the vagina of all animals contains numerous branched cells, resembling connective-tissue corpuscles, arranged just beneath the laminated pavement-epithelium with almost the same regularity as in the cornea, whilst others are scattered irregularly through the membrane. The nerves penetrating through the muscular layer to the mucous membrane consist of large bundles of medullated fibres, which here and there contain groups of ganglion-cells. From these smaller trunks are given off, still medullated, which enter the proper mucosa, or rete Malpighii; as these pass towards the surface the medullary sheath is gradually lost, and the fibrils either bend back or join with a fibril from a neighbouring trunk, forming a very superficial plexus—very close in rabbits, less close in dogs,—or apply themselves to the wall of one of the small vessels ascending to supply the papillæ of the membrane. Some few of them, destitute of medullary sheath, may be seen ascending between the epithelial cells; but the author agrees with Hensen and Klein, and is in opposition to Kühne and Eberth, in stating that the nerves do not join with the branched connective corpuscles mentioned above. The smooth muscular-fibre fasciculi of the membrane are surrounded by a very rich plexus of non-medullated nerve-fibres, from which individual fibres are given off that exhibit here and there granule-like enlargements, and penetrate between the several muscle-cells. He thinks it probable these last are encircled by the ultimate fibrils, but has not been able to find any closer relation to

the nucleus of the muscle-cells, as stated to occur by Klebs, Frankenhaüser, Arnold, Lipmann, Henoique, &c. Following the branches given off to the epithelium from the subepithelial non-medullated plexus still more minutely, he finds that they break up in the deeper layers into a plexus of fibres encircling the epithelial cells, amongst which are large branched corpuscles that blacken more intensely with the chloride of gold, suggesting their nervous nature, and which are identical with those described by Langerhaus in the rete Malpighii of the skin. In the dog, fibrils run up to the most superficial layer of the epithelium, where they appear to terminate by an enlargement of considerable size.

THE LATE EPIDEMIC AT BUENOS AYRES.

WE have received a copy of some medical notes by Dr. Alston regarding the late epidemic of yellow fever at Buenos Ayres, which readily explain the causes of that epidemic having attained such calamitous proportions. The city is devoid of drainage; the surface water runs through the streets in rivers during wet weather, leaving pools of mud and filth behind it; the system of scavenging is quite inadequate; the watercloseta have no traps and lead into cesspits, by which the whole town is honeycombed, the more palatial structures even being built over innumerable masses of these deposits; and, lastly, the city is inadequately supplied with water from waterworks situated a few hundred yards from the principal cemetery. To complete the picture, we have only to add that the place was much overcrowded. The only wonder is, not that diseases spread when they had once originated, but that they should ever have been absent; and, in fact, Buenos Ayres has had its share of them. After the place had been visited during the two previous years with severe epidemics of cholera, some cases of yellow fever made their appearance among the inhabitants in 1870, having been, according to Dr. Alston, introduced from Rio Janeiro, where it had existed in 1869. From the same source that infected Buenos Ayres, the disease was imported up the Paraná river to Paraguay. It was not until the beginning of 1871, however, that yellow fever began to assume an epidemic character, and it attained its maximum in April—the festival of Holy Week of the Roman Catholic Church. The mortality appears to have reached 20,000, some state 26,000. Fifteen medical men died, and a large number retired from the city when the disease was rife. Dr. Alston calls attention to the almost entire immunity from attack of those citizens who from the outset of the epidemic had slept in the country, and only remained in the town for the purpose of transacting business during the morning. Dr. Scrivener has, we believe, been sent to Buenos Ayres from this country to aid in introducing the necessary sanitary reforms.

THE PERILS OF PRACTICE.

A PAINFUL story comes to us from Nuneaton, where a medical practitioner has been frozen to death as a consequence of losing his way when driving home at night. He appears to have driven into a watercourse, where his gig was upset, and his saturated clothes were frozen upon him while he was afterwards trying to recover his way. The next morning he was found in the road by a labourer, and was conveyed to a house, where he died almost immediately upon his arrival. The deceased gentleman, Dr. Eaton, was medical officer to the Nuneaton district. He very lately received a handsome gratuity from the guardians in acknowledgment of the severe work he had gone through in connexion with a recent epidemic of small-pox—a fact which is in itself no small testimony to his worth.

Such an accident as this must necessarily be of very rare occurrence; but the ordinary life of a country surgeon is by no means free from sources of danger, of which not the least is the occasional necessity for riding or driving an over-tired horse. We remember one instance in which a medical man was killed by falling out of his gig when asleep. The horse, as wearied as his master, was supposed to have stumbled in going down hill, and then went on with the empty gig to the stable door. Many similar accidents, although not attended by fatal results, are within the recollection of most of us; and they should teach lessons of carefulness to all whom they concern. The doctor's life is usually too valuable to his patients, always too valuable to his family, to be put in jeopardy by the neglect of reasonable precautions. A pair of gig-lamps would probably have saved Dr. Eaton; and it will usually be found that what we call accident is the result of some carelessness that seems almost criminal after the event. We regret to learn that Dr. Eaton leaves a wife and three children, who were entirely dependent upon his exertions. The sad affair has cast a gloom over the whole neighbourhood.

THE DISCRETION OF CORONERS.

WE published last week a very remarkable series of letters, in which Mr. Edwin Bush, a surgeon residing at Frome, calls in question the conduct of Dr. Wybrants, of Shepton Mallett, coroner for the South-Eastern Division of Somersetshire. With an entire absence of circumlocution, Mr. Bush charges Dr. Wybrants with calling medical evidence in cases in which it was not required, and with omitting to call it when it was required, in both cases with a view to his personal convenience; to secure a lift in the gig of a witness called, or to save a train when the evidence was done without. These complaints have been laid before the County Finance Committee, and will be duly investigated and adjudicated upon at the Quarter Sessions at Taunton in January next. We have no knowledge of the facts of the case, and will not anticipate the decision of the justices. But we cannot refrain from expressing our deep regret at what is, however regarded, a public scandal. It is quite manifest that Mr. Bush must be either absolutely in the right, or very greatly in the wrong; and even if his accusations should be sustained, we shall still regret that one medical man should have felt it his duty to take such a course of action with regard to another. It would surely have been possible to find a complainant beyond the ranks of the profession.

A STATISTICIAN ON STATESMEN.

IN his inaugural address as President of the Statistical Society, delivered on Tuesday evening last, Dr. W. Farr compared the position of modern statesmen, from their ignorance of the actual condition of those over whom they rule, to that of a physician prior to the study of anatomy and to the discovery of the circulation; and pointed out that nothing but the careful study of the facts which it is the province of the statistician to marshal and arrange could render politicians able to legislate under the guidance of knowledge, for the attainment of definite ends, or for the relief of ascertained evils. We heartily thank Dr. Farr for this happy and almost complete analogy; but we must venture to point out one foot upon which it halts. The mediæval physician pursued his track by only a feeble glimmer of empirical illumination; but this, such as it was, stood boldly out against the surrounding darkness. He did not bring his rushlight into the full glare of day, and trust to it for guidance while he turned his back on the sun. This achievement was reserved for the politicians of our own time, who discuss questions which they

know they have not data to determine, and who take no heed of the physical welfare of the people whom they profess to govern, but whom, in reality, they do but cajole.

UNIVERSITY OF LONDON.

THE Chairman of Convocation, at a recent meeting of the Annual Committee, called attention to the question which was raised at the last meeting of Convocation, when he decided that no second voting-paper for the senatorial list could be issued to any member of Convocation—a decision which had caused some dissatisfaction, and to which he had come not without hesitation. As this matter was not provided for by the Standing Orders, it was undoubtedly within his competence to rule as he had done; but it was his wish to act in such cases as far as possible in conformity with the feeling of Convocation and of the Annual Committee; and he desired therefore to obtain an expression of the Committee's opinion on the question now brought before them. After some discussion, the Committee decided that it is desirable that a voting-paper for the senatorial list should be given at the meetings of Convocation to any member requiring the same.

THE MEDICAL TEACHERS' ASSOCIATION.

THE Council of this Association have issued a circular to its members stating that, as there is no pressing matter connected with medical education requiring discussion at the present moment, it has been thought better that the Association should suspend its meetings for a time. The labours of the Association have hitherto been so satisfactory, and the effect they have produced so marked, that we think the Council has shown its wisdom in not frittering away the energies of the Association on unnecessary details. When the amalgamation of the examining bodies is a *fait accompli*, there will doubtless be abundant work for the medical teachers to do in suggesting alterations and improvements in both the curriculum and the examinations. In the meantime the present office-holders will be prepared to act on any emergency, and are authorised to summon a general meeting of the Association on the requisition of any three members. We are glad also to hear that the honorary treasurer has a handsome balance in hand to defray the expenses of a future session.

FEVER IN SUNDERLAND.

WITH reference to the high rate of mortality which has lately prevailed in this town, the Registrar-General stated, in his Weekly Return of the 11th inst., that he had been informed by one of the local registrars that "fever is prevailing to a fearful extent in Sunderland parish." This is attributed to the overcrowding which has partly resulted from the pulling down of houses rendered necessary by sanitary considerations, and, as the population has not diminished, the result is that the remaining houses have to bear the strain of accommodation. The registrar recently visited a house in Vine-street to register two births which had occurred in the two attics of a three-storied house, each occupied by a family. He states that "the stench issuing from them on to the top landing was almost suffocating; fever was raging in both the rooms." In consequence of this statement Mr. J. Netten Radcliffe, the Public Health Inspector, has paid a visit to Sunderland, where he finds that a considerable amount of typhus exists, following the recent outbreak of small-pox. The mortality last week in Sunderland was at the annual rate of 42 deaths per 1000 living, and of 79 deaths registered from all causes, 12 resulted from small-pox, 5 from scarlet fever, and 12 from "fever."

THE PRINCE OF WALES.

THE announcement of the illness of H.R.H. the Prince of Wales has, not unnaturally, awakened universal interest and anxiety. His Royal Highness appears to have been ailing for the last week or more. He originally suffered from whitlow. The symptoms of typhoid fever declared themselves on Monday, the 20th inst. The actual commencement of the typhoid fever probably dates from the 13th inst. On Tuesday night Dr. Gull was summoned, Dr. Oscar Clayton and Dr. Lowe, of King's Lynn, being already in attendance. Sir W. Jenner arrived at Sandringham on Thursday, and the following bulletin was issued on Thursday, at 4 P.M.:—

"H.R.H. the Prince of Wales is suffering from an attack of typhoid fever. There are no unfavourable symptoms."

We are glad to be able to add that up to the present time the condition of his Royal Highness is not such as to excite anxiety.

THE INDIAN MEDICAL SERVICE.

THE Secretary of State for India offers forty appointments for competition in February. It is difficult to understand on what principle the authorities in the India Office act in the matter of these appointments. They have been again and again advised not to suspend the usual February and August competition, even if they only wanted ten or even five assistant-surgeons. In this way they were assured there would be a wholesome competition, and the service would certainly secure the best men in the market who seek a career in the public service. Instead of this, they knowingly starve the service for nearly two years, and then come into the market with a demand for forty men. The inevitable result is, that they must put up with a considerable number of mere "pass men," who can come up with an effort to the *minimum* standard, but who would be simply nowhere in a real competition for a limited number of appointments.

LAIRD VERSUS T. A. WOOD.

THIS was a case of alleged libel. Dr. Laird was house-surgeon of the Isle of Man Hospital, but non-resident, and engaged in private practice. Dr. Wood wrote a letter to the *Isle of Man Times* reflecting on such an arrangement as being likely to be highly inconvenient, and perhaps dangerous to the patients; and moreover open to the objection that the house-surgeon would be under temptation sometimes to treat as private patients cases that should be treated as hospital patients. Dr. Wood further alleged that Dr. Laird got the appointment in consequence of "false representations." We entirely agree with Dr. Wood's theoretical objections to the system of management in this hospital, in which there was not only no resident surgeon, but no proper nurse! The nursing is actually done by two maids-of-all-work! But he certainly erred in giving too personal a character to his charges, and justified the verdict for the plaintiff. When medical men are discussing great public questions like that of the management of hospitals they should display nothing but good feeling towards each other.

COTTAGE HOSPITALS.

THE Seventh Annual Report of the Tewkesbury Rural Hospital appears to be eminently satisfactory, and we are very glad to record another successful effort to establish these institutions in the provinces. But there is a perceptible tendency on the part of those engaged in the management of such hospitals to enlarge their borders too much, and on too extensive a scale. Plans, designs, specifications from architects, and the like, savour of that which

it is the special duty of the promoters of these little institutions to avoid—viz., a large number of beds, and an elaborate system of bricks and mortar. Site and simplicity are the two things needful, with a maximum accommodation for twenty inmates. For it must be kept distinctly in mind that division (even to minuteness) is the essence of success in the cottage hospital scheme, and that unity is not strength if the combined efforts of the philanthropic inhabitants of several villages produce a so-called rural hospital rivalling in extent and capacity that in the nearest good-sized town.

THE APPOINTMENT OF MEDICAL OFFICER OF HEALTH FOR LAMBETH.

THE Lambeth vestry have resolved that the new medical officer of health shall devote the whole of his time to his duties. He is to have a salary of £500 a year. Many candidates have retired, and the chief at present seem to be, first, Dr. Cortis, a local general practitioner, who has taken great interest in local affairs as guardian and member of the Metropolitan Asylums Board; secondly, Dr. MacCormack, who has for some time acted as medical officer at Southampton; and, lastly, Dr. Stallard, who has too frequently rendered important services to this journal to need any testimony on our part as to his superior qualification for the post.

CORK OPHTHALMIC HOSPITAL.

THIS hospital has been in existence about two years, and appears to have accomplished a great amount of useful work at a comparatively small cost. The last report records an income of £135, an expenditure of £174, and it appears that 125 in- and 1547 out-patients were treated during the year. Much of the success that has attended the administration of this small establishment is due to the zeal and energy displayed by its surgeon, Dr. H. M. Jones, who has bestowed upon the inmates much time, attention, and skill.

HOSPITAL SUNDAY AT NORWICH.

NORWICH has at last fixed upon one Sunday in the year for collections in aid of the Norfolk and Norwich Hospital, and in all the places of worship in the city the claims of that excellent institution were advocated on Sunday, the 12th inst. In the Cathedral, the dean, Dr. Goulburn, appealed to a crowded congregation, which responded by a contribution of £64—a sum which strikes us as hardly adequate either to the place or the occasion. The sum total of the collections, so far as had been ascertained up to Saturday last, amounted to about £390.

THE fifth anniversary session of the St. Andrews Medical Graduates' Association will be held at the Freemasons' Tavern on Friday and Saturday, December 1st and 2nd. On Friday evening a discussion will be taken on the treatment, curative and preventive, of habitual drunkenness. The subject will be introduced by Dr. Swete, of Leamington, and several gentlemen who have paid great attention to this important matter are expected to be present. On Saturday, at 5 P.M., the President, Dr. Day, of Stafford, will deliver the anniversary address on "The Historical Steps of Modern Medicine."

AN epidemic of small-pox is reported by the *North Wilts Herald* to have broken out at New Swindon, a town populated mostly by artisans in the employ of the Great Western Railway Company. The disease appears to have been imported by a company of strolling players, to one of whom it has proved fatal.

DR. F. INNES, C.B., has been promoted to the rank of Inspector-General of Hospitals, and will succeed Dr. Beatson as medical head of the Netley establishment on the departure of that officer for India. Two deputy inspectors at least are about to retire on half-pay, and it is believed that several surgeon-majors will also soon go on the retired list. The extreme slowness of promotion in the subordinate ranks urgently requires remedy; but, bad as the prospect is at present, it is not so bad as a correspondent in our columns imagined, owing to the fact that he has not taken sufficient account of the retirements that must necessarily arise from age.

THE Marine Department of the Board of Trade have, under the advice of their medical inspector, published an official notice recommending the masters of all vessels trading to ports in the West Indies and on the south-east coast of North America to take with them an additional amount of quinine, and to give it to their crews as a prophylactic. The notice has been issued in consequence of the large number of cases of intermittent fever that have arrived in England from those ports during the past three or four months.

A SPECIAL sub-committee has been appointed by the Liverpool Health Committee to inquire and report as to the best mode of disposing of refuse, the borough engineer being directed to confer with them on the matter. It is to be hoped that they will not recommend its use for foundations.

THE Council of the Royal Society have this year awarded the Copley Medal to Julius Robert Mayer, of Heilbronn; and the Royal Medals to Mr. George Busk, F.R.S., and Dr. John Stenhouse, F.R.S. We congratulate Mr. Busk on this recognition of his scientific researches in zoology.

THE attempt to establish a "Hospital Sunday" throughout Lincolnshire, for the benefit of the County Hospital, appears to have been fairly successful. The sum already collected amounts to close upon £1000, nearly double what has been obtained in former years.

THE National Hospital for Consumption, Ventnor, has received from J. Pearson, Esq., a donation of £100 towards the Chapel, the foundation-stone of which is to be laid in December next by the Bishop of Winchester.

DR. TAYLOR has been re-elected Chairman of the Health Committee of the Liverpool Town Council.

LADY MORDAUNT has been again placed by her friends under medical care.

THE NAVY REPORT.

THE Statistical Report of the Health of the Navy for the year 1869, which is just issued, in addition to the usual information respecting the several stations of H.M. ships, affords for the first time a report upon the work done in the several naval and marine hospitals, which greatly enhances the value of the volume. Sir Alexander Armstrong deserves the thanks both of his own department and of the profession for thus utilising the valuable material at his disposal; and the publication of these data cannot but have a usefully stimulating effect upon the officers attached to the several hospitals.

The year 1869 showed a slight reduction in the number of cases, with a slight increase in the death-rate, due to yellow fever. On the home station, an epidemic of measles,

of a slight character, prevailed among the boys in one of the training ships, and there was a slight increase of venereal disease, due to importation from places not under the control of the Contagious Diseases Acts. On the North American and West Indian station yellow fever was extensively epidemic, leading to forty-eight deaths, including that of one assistant-surgeon, who fell a martyr to his devotion to his patients. On the fatal West Coast of Africa great benefit was derived from removing the vessels after a limited period of service, the introduction of this practice reducing the sick-rate 248·1 and the death-rate 2·6 per 1000. The total death-rate on that station for the year was 10·4 per 1000 men, being the lowest on record. On the East Indian station cholera unfortunately prevailed, but only two fatal cases occurred in the squadron.

The medical report of Haslar Hospital by Deputy Inspector R. D. Mason, C.B., shows that, during the year 1869, 1348 patients were under treatment in the medical wards; of whom 777 were discharged cured, 310 were invalided, and 60 died. Phthisis, rheumatism, measles, and diseases of the heart were the diseases by which the larger proportion of patients were affected. The surgical report by Deputy Inspector T. Nelson, M.D., and Staff Surgeon J. N. Dick, gives the details of numerous interesting cases, among others of a popliteal aneurism successfully treated by the application of a conical weight. The operations performed were not of especial importance, it being remarkable that no capital operation took place in the hospital during the year.

The surgical report of the Plymouth Hospital by Deputy Inspector Bernard shows a wider field for practice: 2448 patients were under treatment; of whom 1886 were cured, 297 invalided, and 72 died. The surgical operations included a successful ligature of the external iliac artery—which has already appeared in THE LANCET,—amputation of the leg, excision of the elbow, and numerous operations for necrosis. The medical report of the same hospital by Staff Surgeon Irwin shows 930 patients under treatment; of whom 628 were cured, 182 invalided, and 60 died, rheumatism and diseases of the chest being the prevailing maladies.

Deputy Inspector H. J. Domville's report on Melville Hospital, Chatham, shows 1276 admissions; of these 911 were from the Marine division—284 naval officers and seamen,—and the remainder civilians injured in the dockyards of Chatham and Sheerness. Seven of the cases of scald were from the explosion on board the gunboat *Thistle* in November, 1869; and of these three were fatal.

The Naval Hospital at Haulbowline, under the superintendence of Staff Surgeon J. W. Reid, had but a small number of patients; but some of these were of a serious nature, one of them requiring amputation of the arm. The report on the Royal Naval Lunatic Asylum at Yarmouth by Deputy Inspector Macleod is a valuable treatise on lunacy as occurring in the service, to which we shall refer on another occasion. Three essays by officers of the department have been selected for publication with the report. The first is on Heat, by Dr. Alexander Rattray; the second contains notes and statistics relating to boys under training, by Staff Surgeon Wade, which contains much interesting matter; and the third consists of notes of the relative value of vaccination marks, by Assistant-Surgeon E. L. Moss. Altogether the volume is one that is highly creditable to the service, and worthy of the compiler, Dr. Alexander Mackay, the respected head of the statistical branch of the Medical Department.

THE CONTAGIOUS DISEASES ACTS.

AT a special meeting of the Gloucestershire Medical and Surgical Association, called to consider the Report of the Royal Commission on the Contagious Diseases Acts, the following resolution and amendment were discussed:—

Resolution proposed by Dr. Washbourne, Gloucester; seconded by Dr. Paine, Stroud:—"That, in the opinion of this Association, the Report of the Royal Commission upon the administration and operation of the Contagious Diseases Acts conclusively proves that in all localities in which the provisions of the Acts have been enforced, great advantages, both moral and physical, have been the result. This Association therefore believes that the extension of the provisions of the Acts to all sea and inland ports of the United Kingdom would be productive of similar benefit—namely, a marked and progressive diminution both of prostitution and disease."

Amendment proposed by Dr. Morley Rooke, Cheltenham; seconded by Dr. Davey, Northwoods, near Bristol:—"That, in the opinion of this Association, the Report of the Royal Commissioners upon the administration and operation of the Contagious Diseases Acts tends to show that, whilst *some* physical advantages *may* have resulted from these Acts, the Commissioners have very grave doubts as to their moral effects and bearings; and, in the face of recommendations by the Commissioners for such amendments of these Acts as would do away with the principal objections of their opponents, it is highly inopportune for this Association to urge an extension of these Acts in an unmodified form to other parts of the kingdom."

The attendance at the meeting was small, the number of members present being sixteen. Many gentlemen who had expressed their intention of attending the meeting were prevented from doing so by professional engagements at the last moment. Of those present, seven voted in favour of the resolution, and eight in support of the amendment.

At a meeting of the Salisbury Medical Society, held on the 1st inst., the following resolution, proposed by Dr. Young, and seconded by Dr. Good, was passed unanimously:—"That, in the opinion of this meeting, it is desirable that the Salisbury Medical Society should petition Parliament against the repeal of the Contagious Diseases Acts."

Correspondence.

"Audi alteram partem."

MEDICAL EDUCATION AT CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—A notice in last week's LANCET has drawn attention to some remarks made by me on a proposal to admit attendance on lectures on experimental physics into the curriculum of medical study at the University of Cambridge. An imperfect report of these remarks, which appeared in the daily newspapers, has led to a misapprehension which I should be glad to correct. The opinion I did express was substantially the same as that of my courteous critic in THE LANCET. I hold that a knowledge of experimental physics is of very high importance to medical students. What I objected to was only that the time occupied in their study, together with such subjects as botany and comparative anatomy, should be reckoned as part of the minimum period prescribed for *medical* study. For ordinary students the University of Cambridge prescribes five years of medical study; for honour students, a minimum of four years. I am of opinion that a period of four years is in no case more than sufficient to devote exclusively to medical studies, and that it should not be curtailed by giving up a part of it to other subjects, which, however important, are not strictly medical. The proposed new regulation would have allowed of this.

Faithfully yours,

Cambridge, November, 1871. G. E. PAGET, M.D.

THE DEGREE OF M.D.

To the Editor of THE LANCET.

SIR,—The leading article in your impression of the 18th inst., on the degree of M.D., appears at an opportune time.

I, in common with many other graduates in Arts and Medicine, think a great hardship is imposed on qualified practitioners who are desirous of improving their professional status, by the fact of their being precluded from graduating in medicine because they, from no fault of their own, did not matriculate in some university, or fix their residence in a university town at the outset of their medical studies; as it frequently happens that a variety of reasons,

pecuniary and others, prevent men from taking these steps at the proper time.

The subject has suggested a plan to me which, if adopted by the universities, would enable such men as I have mentioned to obtain an honourable degree. This plan is—that the several universities should make such changes in their regulations as to allow legally qualified men to pass two fairly testing examinations in arts, giving an interval of a year between each, after which, without residence, they should be allowed to become candidates for the examination for their degree in medicine. This would not make such a degree too easily obtainable, or of slight value, and at the same time would place its attainment within the reach of educated men, and would leave no excuse for the continuation of the scandalous practice of importing purchased foreign degrees.

The languishing university of St. Andrews might be turned into good account in this way. That university, which at present offers no inducement to men to reside there, might with advantage be allowed to examine candidates and grant degrees in medicine in accordance with the regulations of the Scottish Universities Commissioners, minus the requirement of two years' residence.

I am, Sir, yours obediently.

SIDNEY HERBERT CABTER, B.A., M.B. T.C.D.

Bristol, Nov. 20th, 1871.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—It is not long since you advocated the cause of the unfortunate candidates for the Indian Medical Service in the columns of THE LANCET, and represented to the authorities and the public the great annoyance and considerable loss of time and money caused by the repeated and indefinite postponement of the examination for the Service. You then pointed out that this policy was a source of great hardship to those candidates who had undertaken costly journeys to this country, sacrificing social advantages and giving up respectable positions in the uncovenanted service for the purpose of obtaining a commission in the medical service of their country. These unhappy candidates have returned home after a residence of nearly two years here, and before they have had time to forget the irreparable losses they sustained, the Indian Government announces that an examination for the medical service will be held in February next. I have just received some extracts from a very influential native journal noticing this decision of the Government, and showing how the authorities have added fuel to the flame and aggravated the injury to the Hindoo candidates.

It is perhaps absurd to think that there is a malicious motive in this policy, but there can be no doubt that these candidates have been greatly wronged, and that the conduct of the authorities has been altogether thoughtless and indifferent, if not unjust. The *Indian Mirror* proposes "a fair and honourable mode of avenging the injustice that has been done to them accidentally or deliberately," and advises that the disappointed candidates should start for England and appear at the examination in February, and that if they are poor their liberal countrymen ought to extend their helping hands. A subscription-list has been set on foot for the purpose.

Now, Sir, it is possible that these candidates will find the means of coming here in February. But, having regard to the fact that an injustice has been done to them, does it not appear unfair that they should be compelled to return to England for the examination? These candidates used every means in their power to represent the hardships of their case to the authorities. They forwarded in May last a memorial signed by the candidates and endorsed by the professors of the Glasgow and Aberdeen Universities where they had studied, to the Secretary of State for India, to which his Grace the Duke of Argyle sent a very polite and sympathising reply. Failing in this they enlisted the sympathy of an eminent member of Parliament, who moved the subject in the House, to which Mr. Grant Duff made that ever-memorable reply, "I have not the remotest idea" as to when the next examination would take place. It may fairly be asked why Mr. Duff did not telegraph to the Government of India before he gave this very curt answer to Colonel Sykes's question. The Hindoo candidates have been sufferers entirely through the indifference of the Government, and it is to be hoped that enlightened members of the House like Colonel Sykes, Sir Edward Colebrooke, Dr. Lyon Playfair, and Mr. Gordon will endeavour to procure for them the privilege of being examined in India, thus avoiding another journey to England.

The regulations for the Indian Medical Service were framed when the colleges in India were in their infancy, and the profession in its cradle. During the last few years these colleges have made wonderfully rapid progress, and it has been said by the highest authorities that they are now equal to any in the United Kingdom. It is unreasonable, therefore, that candidates from India should be compelled to come to England to be examined, and should be required to obtain qualifications in Medicine and Surgery in Great Britain, when they have to practise the healing art in India, and on their own people. You will, I trust, agree with me in the opinion that it is high time the regulations for the Indian Medical Service were revised.

I am, Sir, yours, &c.,

London, Nov. 11th, 1871. A TRAVELLING FELLOW.

ROYAL FREE HOSPITAL.

To the Editor of THE LANCET.

SIR,—With reference to that portion of the report of your Commissioner which relates to the night-nurses of the above hospital (contained in your number of the 11th), permit me to make the few following remarks, which, as you (in common with us all) have the best interest of the hospital at heart, you will, I am sure, receive with satisfaction, as I assure you you may with safety.

1. Without discussing the ages of the night-nurses, I may say that the Weekly Board have ample testimony that they are, each and every one of them, *efficient* nurses in every sense of the term, and fully qualified to perform the duties of night-nurses.

2. Each floor has two wards, the doors of which are opposite to each other; they are generally left open at night, and there never has been, nor is there likely to be, any difficulty in the way of one nurse communicating with another, should need require.

3. Experience shows that there is no difficulty in a nurse being fully cognisant of all the wants of patients in the night at whatever part of the ward such nurse may be.

4. The lady-superintendent invariably goes through the wards once every night, and the nurses have no indication of the time of her visits; in special cases the lady-superintendent visits patients several times during the night.

Wishing you every success in your endeavours to improve the condition of these valuable institutions,

I am, Sir, yours faithfully,

JAMES HOPGOOD,

Nov. 22nd, 1871. Chairman of General Committee of Hospital.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

THE epidemic of small-pox which has been impending over Birmingham for some time has at last declared itself amongst us. The Inspection Committee of the Town Council must at once take steps to provide a temporary hospital for small-pox patients, as the contagious wards of the Queen's Hospital are full, and the authorities of the General Hospital, having already nine cases under treatment, are not anxious to increase the number. It is to be hoped that a medical officer of health will here, as at Wolverhampton, be forthwith appointed, and that prompt action will be taken to ensure the removal and isolation of all cases of the disease without the least delay, and also the performance of revaccination on a large scale. All the Black Country towns are simultaneously threatened, and in many, as at Oldbury and Bilston, the disease is showing itself in a severe form, and is attacking a great number of persons. At Wolverhampton, however, small-pox has at present found its most numerous victims. There are now

over 200 pauper cases, besides a great many in the middle and upper classes of society. Persons in this sphere of life seem to have a great antipathy to having their friends removed to a suitable hospital, and hence the number of centres of infection is greatly increased. It is gratifying to find that since the paupers in the Wolverhampton Workhouse were revaccinated no case has occurred in the house. No wonder that Wolverhampton is suffering so severely from epidemic disease when we learn, from a report recently presented to the Town Council on the sanitary state of the borough, that "nuisances of a dangerous character are almost universally prevalent," and that "the town is in a fearfully insanitary condition."

The suits against the Corporation of Birmingham for the abatement of sewage nuisances, which were to be tried in Vice-Chancellor Bacon's Court, are to be postponed until December, to give the Council time to mature the arrangements recently decided on for carrying out the recommendations of the Sewage Inquiry Committee.

The proposed new buildings at the Queen's Hospital, of which Lord Leigh is to lay the foundation-stone on Dec. 4th with masonic rites, include—1. An out-patient department and dispensary, with residences for officers, nurses, and gate-porter. 2. A glazed corridor, connecting the new block with the present hospital, and available as a conservatory for the recreation of convalescent patients. 3. A complete bath house. 4. Two blocks of wards, with convalescent rooms, to accommodate forty-eight patients jointly. 5. A building for laundry purposes, and a detached mortuary and post-mortem room. At the monthly board of that institution the following resolution, moved by Mr. West, and seconded by Mr. Gamgee, was adopted: "The Committee of the Queen's Hospital hereby express their regret at the loss the institution has sustained by the death of Mr. Langston Parker, F.R.C.S., one of the consulting surgeons, who, during the first twenty years of its existence, largely contributed by his labours and scientific repute to the promotion of the best interests of the hospital."

Hospital Sunday has been more than usually successful this year. The sum of £4736 has already been collected for the General Hospital. It is very gratifying to think that, after thirteen years' experience of the movement, the amount realised is this year only second to that raised on the first occasion when the movement was initiated by Canon Miller, who was then Rector of Birmingham, for the good of the same charity. During that time the sum of £50,970 has been collected by this agency, and all the charities have benefited to a much greater extent than the most sanguine supporters of the Hospital Sunday could, at the first onset, have believed possible. The distribution is arranged on a most equitable plan. The General Hospital receives the benefit one year, the Queen's Hospital the next, and the minor charities the third year; so that all, in turn, receive their fair share of help from this admirable system, without which many of the charities of Birmingham could now hardly exist.

The conversazione of the Midland Medical Society proved a great success; upwards of 150 of the leading practitioners of the town and district availed themselves of the invitation of the President (Mr. West), and great interest was displayed by one and all in the admirable address of Dr. Lionel Beale, F.R.S., on "Contagious Disease Germs: their Nature and Origin." A discussion ensued, in which Dr. Nelson and Mr. Furneaux Jordan took part, and a cordial vote of thanks to Dr. Beale for his courteous acceptance of the invitation of the Society, and for his valuable paper, concluded the proceedings. Fifteen new Fellows and six new Members were proposed, but the ballot was postponed until the next meeting, so as not to interfere with Dr. Beale's lecture, or prevent those present enjoying the excellent display of microscopes and specimens which had been provided by the secretaries (Mr. Mann and Dr. Sawyer), or the valuable collection of surgical instruments exhibited by Mr. Salt, of Birmingham.

Under the will of the late Mr. Bernard Rice, surgeon of this town, the General Hospital, the Queen's Hospital, the Sick Children's Hospital, the General Dispensary, the Orthopædic Hospital, and the Blind Asylum will each receive a legacy of £50; the Eye Hospital and the Birmingham Sanatorium £25 each; the Deaf and Dumb Asylum £20, and the Ear and Throat Infirmary £10.

Birmingham, Nov. 14th, 1871.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

THE scarcity of physicians in this town has long been the subject of remark—physicians in the old sense of the term, who confine their practice almost entirely to consultations, who do not practise midwifery, and are not dependent on family practice. Of such, there are not six in Liverpool, probably not three who would come under all these heads. The scarcity at the present time is felt in another way. The laws of our three great hospitals make it imperative that their physicians should practise neither surgery, pharmacy, nor midwifery, and should possess certain degrees. The consequence is, that of late years considerable difficulty has been felt in filling up vacancies whenever they occur. For several months the Northern Hospital has had but one physician, owing to the transference of the other to the Royal Infirmary, and the inability of the committee to obtain another in his place; and now, through the resignation of Dr. Vose, there is again a vacancy at the infirmary, and amongst the candidates for the appointment is Dr. Glynn, the remaining physician at the Northern Hospital. If he should be appointed, the hospital will be without a physician. This alarming prospect has of late greatly exercised the minds of the committee and medical board, and, after various discussions, the latter have agreed, by a majority, to recommend the committee to suspend the law which at present prevents the practiser of pharmacy, midwifery, and surgery from seeking the vacant appointment, whilst still retaining the law which defines the degrees required. The committee have not as yet come to any decision, and, in the meantime, the attention of the profession in the town has been drawn to it, and it has been made the subject of discussion at the Medical Society, where the balance of opinion is decidedly against the change. The status of a hospital staff should not be destroyed without serious consideration. If these appointments are of any value, if they confer a dignity and give a recognised position to the possessor, and if they are still to be looked up to as prizes in the professional lottery, then they should not, from a temporary difficulty, be deprived of the only safeguard which is likely to keep them out of the hands of the mere adventurer, or still worse, of the professional quack. The rule that the demand will create the supply is as likely to hold good in this instance as in most others. Within the last two years we have had two young physician converts, who previously practised as general practitioners, both now holding hospital appointments, having given up general practice to enable them to do so, and I have never heard they have any reason to regret the step; and now we have two more, in the face of the present difficulty, magnanimously throwing themselves into the breach, prepared to sacrifice general practice for the sake of obtaining the honourable posts of physicians to the Royal Infirmary and Northern Hospital. Seriously speaking, these gentlemen have calculated the cost, and have doubtless come to the conclusion that they stand a very fair prospect of obtaining, after a time, a good position as physicians in the town. It is to be hoped, therefore, that the trustees of the Northern Hospital will not be induced to take any retrograde step, but, with the prospect which has just arisen of certain candidates coming forward whenever the vacancies are declared, will keep the present laws in force.

The Liverpool Medical Society commenced the winter session in October last with a most successful meeting. Upwards of seventy members were present, and the introductory address of the President (Mr. Bickersteth), a comprehensive *résumé* of the surgery of the last few years, was listened to with interest and pleasure. The subsequent meetings have been equally successful.

The fifth volume of the "Liverpool Medical and Surgical Reports" appeared lately, and contains several papers of great interest. Dr. De Zouche's account of the relapsing fever which so largely prevailed here last year has an interest beyond this town. The practitioner in other towns who has not seen the disease will find in it a very complete description of the symptoms, varieties, pathology, and sequelæ of this fever.

Liverpool, Nov. 23rd, 1871.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on the 16th and 17th inst.:—

Boon, Alfred P., Delamere-crescent.
Cable, George H., Greenwich.
Cowley, John S., Upton-on-Severn.
De Morie, Henry Eugene, Brook-street, Grosvenor-square.
Ewart, William, Montpellier-square, Brompton.
Gill, Stanley A., L.R.C.P. Edin., Torquay, Devon.
Harbinson, Alexander, M.D. Queen's Univ. Irel., Newry, Co. Down.
Harrison, Thomas, Stafford.
Head, William Cave, L.S.A., Lewes, Sussex.
Hendry, James A., Liverpool.
Jago, Thomas, Saltash, Cornwall.
James, David P., Narberth, South Wales.
Johnston, Frederick P., Taunton, Somerset.
Julius, Stanley A., Mortlake, Surrey.
Lee, Alfred R., L.R.C.P. Edin., L.S.A., Tollington-park.
Lees, Frederic A., ——, near Leeds.
Magill, James, M.D. Queen's Univ. Ireland, Cork.
Masterman, George F., L.S.A., Croydon, Surrey.
Rogers, William Richard, M.R.C.P. Lond., Berners-street.
Ramsey, Ebenezer J., Queen-Anne-street.
Seale, George J., L.S.A., Merthyr Tydfil.
Sergeant, Edward, Preston, Lancashire.
Slater, John S., L.S.A., Bath.
Sloane, Ebenezer E., M.D. Queen's Univ. Irel., Lisburn, Co. Antrim.
Smith, Joseph P., Edgbaston, Birmingham.
Thomas, John H., L.R.C.P. Lond., L.S.A., Carmarthen, South Wales.
Yate, Edward, Godalming, Surrey.
Walsham, William J., L.S.A., Tyndall-place, Islington.
Wright, John Rowland, the Bank, Leicester.

The following gentlemen passed the first part of the professional examination for the Fellowship of the College at a meeting of the Court of Examiners on the 21st inst.:—

S. B. Partridge, John S. Wells, and H. C. Moss, King's College; William Harvey, Charing-cross Hospital; T. A. Roe, Cork; C. Higgins and G. A. Dundas, Guy's; G. H. Evans, St. Bartholomew's, Birmingham, and Edinburgh; C. H. Joubert, St. Mary's; H. W. Page, Cambridge and London Hospital; H. B. Donkin, St. Thomas's; B. J. Massiah, Bristol.

Of the 21 candidates examined, 9 failed to satisfy the Court, and were referred for six months' further anatomical and physiological study.

For the final examination for the Fellowship of the College, which commenced on the 22nd inst., there are 12 candidates.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 16th:—

Hosking, Ethelbert, Woburn-square.
Parkhouse, Henry, Braintree, Essex.
Whittington, Charles Edward, Tuxford, Notts.

As Assistant in Compounding and Dispensing Medicines:—
Kimber, Benjamin Tindale, Southampton.

On the same day the following gentlemen passed their first professional examination:—

Frederick William Lewis, Middlesex Hospital; Alfred Warren, Charing-cross Hospital; Thomas Decimus Paradise and James Sealey Whitaker, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF IRELAND.—At the quarterly examination held on the 18th ult. the following passed their preliminary examination in Arts:—

FIRST CLASS.—Standish S. O'Grady, James O'Brennan, James Laffan, John P. Barber.

SECOND CLASS.—Nicholas J. Gossan, Thomas E. Ryan, Chas. G. Maturin, Leslie Maturin, Chas. Roe, John Dockery, Kenneth Maclennan, Patrick Larkin, David Rose, Valentine Miley, John M'Nulty, Michael H. Carmody, John A. O'Meehan, Edmund G. Barnes, Francis G. Turner, James M'Neece, Conolly Norman.

THIRD CLASS.—Edwin H. Bestie, Michael Callan, Edward C. Clanchy, Joseph Clark, John C. Cochran, Michael C. Cullinan, Charles Death, Richard T. Dundas, Arthur Finucy, John M. Harrington, Samuel Kennedy, Osborne Limmick, Thomas Mitchell, Edward Richards, Brown Roberts, John Rossborough, George Smith, Hugh Warnock, Hugh Joseph Warnock.

DR. JAMES COOMBS has been elected Mayor of Bedford.

CHOLERA PRECAUTIONS AT SMYRNA.—It is reported that ten days' quarantine is to be performed on a barren island, about twenty miles from the port of Smyrna, by all persons coming from places where cholera exists, and it is also stated that though this regulation has been made, proper measures for the care of the persons detained have not been taken. It is to be hoped that, if the regulation is to be enforced, due regard will be paid to the requirements of those who may, unfortunately, have to undergo this quarantine.

DR. SHORTT, superintendent of vaccination in Madras, has met one of the obstacles to the progress of the operation in India by training women as vaccinators to attend on native ladies.

DEATH UNDER CHLOROFORM.—On Tuesday, Mr. Humphreys held an inquiry at the London Hospital regarding the death of Mr. Daniel Ellis, aged thirty-three years, who expired during amputation of the first and second toes of the left foot. Verdict: "Death accidentally caused by chloroform."

Medical Appointments.

ALLEN, T., L.R.C.P.L., has been appointed House-Surgeon to the Great Northern Hospital, Caledonian-road, vice Julian Willis, M.R.C.S.E., resigned.

BARTLETT, J. J., L.R.C.P., has been appointed Surgeon to the Dispensary, Church-street, Kensington, vice T. O. Dudfield, M.D., resigned.

BLAIR, R., M.B., C.M., has been appointed Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary.

BUTTERFIELD, H., M.R.C.S.E., has been appointed Medical Officer to the Medical Aid Association of the Odd Fellows, Manchester Unity Friendly Society, Bradford.

CAVE, L., M.B., has been appointed a Clinical Assistant to the Hospital for Women, Soho-square.

COOPER, A., F.R.C.S.E., F.R.C.S.Ed., has been appointed Surgeon to the Royal Hospital for Diseases of the Chest, City-road, vice Francis Mason, F.R.C.S.E., resigned.

COOPER, G. J., M.R.C.S.E., has been appointed Resident Medical Officer to the Poplar Hospital, East India-road, vice Edmund Vialls, L.R.C.P.Ed., M.R.C.S.E., resigned.

ELDER, G., M.B., C.M., has been appointed Resident Surgeon-Apothecary to the General Hospital, Nottingham, vice A. G. Mickley, M.B., L.R.C.P.L., M.R.C.S.E., resigned.

EMBLETON, D., M.D., has been reappointed a Medical Visitor of the Dunston Lodge Lunatic Asylum, near Gateshead-on-Tyne.

FRY, J. H., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Highworth and Swindon Union, vice J. K. Kenyon, M.R.C.S.E., resigned.

HAVARD, D., L.R.C.P.L., M.R.C.S.E., has been appointed Admiralty Surgeon and Agent, and Certifying Factory Surgeon, for Newport, Pembrokeshire, vice D. Bowen, M.R.C.S.E., deceased.

HUSBAND, W. D., F.R.C.S.E., J.P., has been appointed Visiting and Consulting Medical Officer to The Retreat Lunatic Asylum, York, vice Caleb Williams, M.D., M.R.C.P.L., deceased.

KEYS, R. A., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Resident Medical Officer at the Toxteth-park Workhouse, Smithdown-road, Liverpool, vice Alex. McGregor, L.R.C.P.L., resigned.

LAWRENCE, H. C., L.R.C.P.L., has been appointed Pathologist to the Sophia Nursery for Infants, Fulham.

MILLIGAN, J., M.R.C.S.E., has been appointed Medical Officer of Health for Keighley, Yorkshire.

NATHAN, H., M.R.C.S.E., has been appointed Medical Officer for the Melcombe Regis District of the Weymouth Union, vice F. C. G. Griffin, M.B., M.R.C.S.E., resigned.

NEAL, BRENWARD, L.R.C.P.Ed., has been appointed Assistant Medical Officer to the Cornwall County Asylum.

PENTLAND, H. DE M., L.R.C.P.Ed., L.R.C.P.Ed., has been elected Medical Officer to the Kingsland (Herefordshire) Friendly Society.

PHILIPPS, S. R., M.D., C.M., has been appointed Assistant Medical Officer to the Devon County Asylum.

PIKE, Mr. C. E., of St. Bartholomew's Hospital, has been appointed Assistant House-Surgeon to the Cumberland County Infirmary, Carlisle.

SHANN, G., M.D., F.R.C.P.L., has been appointed Visiting Physician to the Terrace House Lunatic Asylum, Osbaldwick, York, vice Caleb Williams, M.D., M.R.C.P.L., deceased.

STEELE, H. M., M.R.C.S.E., has been appointed a Clinical Assistant to the Hospital for Women, Soho-square.

WALLIS, A. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 7 of the Romford Union, vice C. Butler, F.R.C.S.E., deceased.

WELLS, J. S., M.D., M.R.C.S.E., has been appointed Consulting Surgeon to the Shropshire Eye and Ear Hospital, Shrewsbury, vice G. F. D. Evans, M.D., M.R.C.P.L., deceased.

WILLIAMS, I. M., M.R.C.S.E., has been appointed Visiting Medical Officer to the Lawrence House Lunatic Asylum, York, vice Caleb Williams, M.D., deceased.

WIMBERLEY, C. C., M.D., M.R.C.S.E., has been appointed Honorary Surgeon to the Coventry and Warwickshire Hospital, vice R. Plowman, L.R.C.P.L., M.R.C.S.E., resigned.

Births, Marriages, and Deaths.

BIRTHS.

BALLARD.—On the 20th inst., at Compton-terrace, Islington, the wife of E. Ballard, M.D., of a daughter.

DEAN.—On the 20th inst., at Church-road, Upper Norwood, the wife of P. T. Dean, L.R.C.P.Ed., of a son.

GRIEVE.—On the 21st inst., at Lower Lawn-road, Hampstead, the wife of Robert Grieve, M.D., of a son.

LOMAS.—On the 20th inst., at Finsbury-square, the wife of Wm. Lomas, M.D., of a son.

VALENTINE.—On the 8th ult., at Byrne Castle, Simla, the wife of Dr. Colin S. Valentine, F.R.C.S., Physician to H.H. the Maharajah of Jeypore, Rajputana, India, of a daughter.

WORKMAN.—On the 16th inst., at Clarendon-terrace, Teignmouth, the wife of C. J. Workman, M.D., of a son.

MARRIAGES.

AVERILL—GOODWYN.—On the 18th inst., at Tetbury, Alfred Averill, M.R.C.S.E., to Maria Anne Goodwyn, daughter of J. G. Goodwyn, Esq.

BARWELL—SHUTTLEWORTH.—On the 15th inst., at Christ Church, Preston, Richard Barwell, F.R.C.S.E., of George-street, Hanover-square, to Mary Diana, daughter of Thomas Starkie Shuttleworth, Esq.

JOTHAM—WARWICK.—On the 16th inst., at Southend, Essex, George Wm. Jotham, M.B., of Kidderminster, to Edith, daughter of W. R. Warwick, M.D.

DEATHS.

ANDERSON.—At sea, on the homeward voyage from Sydney, N.S.W., Wm. John Anderson, F.R.C.S.E., aged 60.

CAMMACK.—On the 27th ult., Thomas Armstrong Cammack, M.D., of Boston, aged 46.

DAVIS.—On the 17th inst., at Tottenham, Robert Wm. Davis, M.R.C.S.E., formerly of Finsbury, in his 63rd year.

DE LA GARDE.—On the 17th inst., Philip Chilwell De la Garde, F.R.C.S.E., of Southernhay-place, Exeter, aged 74.

METCALFE.—On the 13th ult, at Mussoorie, Himalayas, from a fall with his horse down a precipice, Penwick Metcalfe, M.R.C.S.E., Bengal Medical Staff, Civil Surgeon Kurnaul, aged 31.

STEGGALL.—On the 21st inst., at Southampton-street, Bloomsbury-square, Dr. Steggall. Respected and lamented by all who knew him.

BOOKS ETC. RECEIVED.

Dr. Stewart: Bright's Diseases. Second Edition.
Dr. Gibbons: Tobacco. An Essay.
Rev. J. G. Wood: Insects at Home.
Dr. Wilson: Inorganic Chemistry.
Dr. Living on Skin Diseases.
Dr. Bennet on Pulmonary Consumption.
Dr. Reynolds: Clinical Uses of Electricity.
Dr. Hamilton on Fractures and Dislocations.
Dr. Bence Jones: The Royal Institution.
Dr. Murray: Smoking—when Injurious, when Innocuous, when Beneficial.
Manchester Medical and Surgical Reports.
Dr. M'Bleuy: The Clinical Thermometer.

Medical Diary of the Week.

Monday, Nov. 27.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 3 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Alfred Freer, of Stourbridge, "On a Case of Impalement."—Mr. Wm. Adams, "On a Case of Webbed Fingers treated by Mr. Tamlin's Instrument."—Mr. Brudenell Carter: "Ophthalmic Demonstrations."

Tuesday, Nov. 28.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Fairlie Clarke, "On Unilateral Atrophy of the Tongue."—Dr. Priestley, "On Intermenstrual or Intermediate Dysmenorrhœa."

Wednesday, Nov. 29.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 2 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Nov. 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Expected Operations, 3 P.M. External Urethrotomy and Operation for Vesico-Vaginal Fistula: by Mr. Teevan.—Operation for Fistula in Ano: by Mr. Cooper.

Friday, Dec. 1.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 2.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

TREATMENT OF HEPATIC AFFECTIONS BY MURIATE OF AMMONIA.

As our readers are aware, attention has been directed of late to the therapeutical properties of muriate of ammonia in inflammatory diseases of the liver, and the reprint of a paper by Dr. Alexander, Staff Assistant-Surgeon, from the *Madras Monthly Journal of Medical Science*, puts us in possession of some additional experience. Dr. Alexander records the results of the treatment of three cases which, added to the eleven that have been treated in the 21st Regiment since the commencement of the muriate of ammonia treatment in Burmah, lead him to hope that recovery may be the rule, and not the exception, in suppurative diseases of the liver. The administration of this salt is now being put to the test in various parts of India. If we can only discover a remedy for such cases equal in efficacy to that of ipecacuanha, for example, in dysentery, it will, no doubt, prove a real advance in practical medicine. Without desiring in any way to undervalue the observations that have been already published, we should be glad to see the points on which the diagnosis of hepatic abscess is founded more clearly stated in any future records of cases, as well as exact observations as to the size of the liver, the temperature of the skin, &c. Muriate of ammonia has been frequently used in hepatic diseases, especially in Germany; but we want more exact information as to the nature of the cases for which it is applicable, and the changes, if any, that are fairly attributable to its action. Does its administration prevent suppuration from taking place? or does it cure it when present, and, if so, how, and what becomes of the pus?

A Regular Subscriber, (Manchester.)—We have many times adverted to the practices which form the subject of our correspondent's communication. Persons who condescend to them are not likely to be influenced by anything that seems calculated to diminish their pecuniary profits.

M.R.C.S.—The best course would probably be to make an application to the magistrates by whom the fine was inflicted.

THE communication of *Dr. G. R. Gilruth* shall appear next week.

PREVENTION OF MAMMARY ABSCESS.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me space in the columns of your journal for the following remarks.

During the last fifteen years' practice in the colonies I have been somewhat amused by reading the many theories put forth by my professional brethren at home as to the proper treatment of "mammary abscess." The remedies advocated are almost as numerous as the cases to be met with. During the last few years it has very frequently occurred to me as to whether we could not devise some means of preventing the formation of such abscess altogether, instead of waiting until inflammation and suppuration has actually taken place. Physiology has taught us that the chief cause of mammary abscess occurring soon after parturition is the obstruction within the milk ducts. In this communication I propose to deal with the cause, leaving the effect to more skilful hands to deal with, and, in doing so, endeavour to prevent the obstruction above referred to. It is almost needless for me to say that mammary abscesses are very tedious and difficult to cure, and seldom pass without leaving behind evils which continue for a long time; and where there has been a free use of the lancet the breast becomes so mutilated as to render futile all future attempts to suckle the infant.

The remedy I have found excellent is a free use of olive oil as an emollient and stimulating external application. The mode I usually employ is to cut a piece of lint the size of each breast, allowing it to come well under the axilla, leaving a hole for the nipple to pass through for the infant to suck. Before applying the lint, saturate it well with the best olive oil, and envelope the breast; next cut a piece of oiled-silk the shape and size of the lint, and cover it over the breast so as to prevent the oil from soiling the linen. In all cases let this be applied not later than the second day after the accouchement. As the lint becomes dry, moisten with more oil. Let this be applied until the patient is able to get about. I have tried it in many cases, several of which were primipara, and in no single instance has it failed. Besides, it not only prevents the obstruction of the milk-ducts, by its heating and emollient properties stimulating the capillari around the base of the gland, but it also causes the milk to flow from the excretory ducts involuntarily (tubuli lactiferi), or, what is better understood in the phraseology of nurses and midwives, by causing the breasts to run. I am of opinion that if the oil is properly applied, and at the proper time, there no longer remains cause to fear the formation of mammary abscess. What I formerly treated with repeated nauseating doses of tartar emetic, thereby debilitating the patient much more than necessary under such circumstances, I now treat with the olive oil, without the use of so depleting a drug as antimony.

Trusting the foregoing remarks may be of some interest to my brother practitioners all over the world,

I remain, Sir, yours faithfully,
W. R. G. SAMUELS, Surgeon,
Member of the New Zealand Institute.

Wanganui, New Zealand, Aug. 20th, 1871.

INFIRMARY REGULATIONS.

A CORRESPONDENT, desirous of drawing up a code of regulations for a county infirmary, embracing rules for admission and medical attendance, for duties of resident medical officer, nursing, commissariat arrangements, storing and expenditure of drugs, &c., would feel very grateful to anyone who could direct him to any publication giving the requisite information, or to some method by which he could obtain it.

THE SOLDIER AND HIS PAY.

THE Inspector-General of Military Prisons, in his late Report, has remarked upon the increase of crime during the past few months in the army, which he attributes in some measure to the weekly pay system. We had previously called attention to the same subject in connexion with the increase of diseases attributable to intemperance. It must be remembered, of course, that the strength of the army in Great Britain and Ireland is 100,970, as against 84,848, the average of last year. Captain Du Cane says that a change in the system of paying soldiers is not likely to have been made without producing among the thoughtless and uncontrolled some such effect as has actually arisen; but he thinks that it is correct in principle, for no men of the same class in civil life have been in the habit of receiving their pay daily. A change in the soldier's character and conduct can only be effected by raising his ideas, and by teaching him to care for and improve himself; and as he is now afforded great inducements to do so, it is reasonable to expect that he will take advantage of them. It is, indeed, the Inspector thinks, "a subject for consideration whether it would not be an improvement even to pay the soldiers only monthly, as they would be more likely to value the accumulation of a month with a view to future use, and at all events would have the temptation to a debauch less frequently." Whilst upon the subject of military crimes and their punishments, we wish that the foolish system of unproductive labour in military prisons could be abolished. A man whilst in prison should be made to support himself, at any rate, by his labour; and it is open to question whether, in equity, his military pay ought not to go to his comrades, who have to take up the duty which he escapes.

A. B. had better take the opinion of any respectable professional man, and avoid all advertising quacks.

WE are reluctantly compelled to defer our notice of Dr. Kidd's address at the Dublin Obstetrical Society, and other papers, until next week.

BRONCHITIS, HEMOPTYSIS, AND INHALATION.

To the Editor of THE LANCET.

SIR,—Referring to your correspondent's letter on the above subject in your issue of the 4th inst., I venture to remark that I published my strictly *personal* experience of the large and continued doses of gallic acid to the end that the profession may have the benefit of that experience, and, whether prudent or not, the treatment my tedious malady has met with has always, you may be sure, been most carefully considered by myself, and in its course approved by many of the most careful and very best men of the day. I need not say we have over and over again made a *vexata questio* of the query as to tubercular deposit and the heart and great vessels. The physical signs seem to deny any abnormal condition. I have pleasure in fancying "M.A." as a lively gentleman who has never been much afflicted with such maladies as have vexed me for the last three years. People in health little realise the uneasiness which we invalids suffer. If our friend had in his person experienced the relief that I have in mine from internal pain by the application of a small blister, and its frequent repetition, as well as the use of other well-considered remedies, he would look upon them as being the reverse of irritating to the physique. We consider my case somewhat peculiar in its progress, but simple in its origin.

The very cold east wind of the spring of three years ago having induced congestive pneumonia in a system rendered weakly by mental worry, and advancing years devouring its recuperative power, circumstances have interfered with my having the rest and freedom from worry that my case required, otherwise I believe I should have been well long ago. As it is, I have been obliged to meet the various maladies and sufferings as they forced themselves on my feelings. "M.A.," never having suffered in his throat, would not believe in the efficacy of passing through the rima a solution of nitrate of silver, two scruples to the ounce of water. I suffered so much that, not having a safe operator at hand, I was in the habit of doing it for myself; that and external treatment did eventually relieve the throat, I may almost say cure. Of course I have taken dilute phosphoric acid; but I have not partaken of any phosphorus dissolved in oil; but as I am weak and delicate, I seem to prefer it should be tried on some other "corp."

After all, it is not even now certain that I was poisoned by the gallic acid. As I have before said, the exhibition of the large doses was watched and approved by most competent professional skill; and when I was attacked with the cardiac distress I was taking only small doses, and after a lengthened disuse, and as I had suffered twenty years before from slighter attacks of the same sort, the cause of them is doubtful.

As to inhalation of drugs, it is easy to prescribe it for patients, but not so simple to carry out. I have done my utmost to get the vapour from the inhaler loaded with the succus conii, lobeliæ, belladonnæ, &c., but not succeeded at all. The ether of an etherised preparation travels into the lungs all right enough, so does creasote, naphtha, &c.; but the tinctures and succi, in my experience, refuse to be vaporised at even 180°. The best way is to break up their leaves and put them in the water. Naphtha, creasote, and sulphoric ether are the only drugs that I have found indisputably beneficial in this way.

I trust, Sir, that you will consider the peculiarity of the foregoing personal experience an excuse for the necessary egotistical style, and will confine myself to the statement that my weight is the same as before my illness, and, thank God, appetite and digestion good; so that our pills and potions are not to be despised.

I am, Sir, yours, &c.,

November 8th, 1871. F.R.C.S.

General Practitioner, (Landore.)—We are unable to furnish our correspondent with more precise information, or with easier methods of procedure, than those already published in several chemical works. There is no royal road to analytical chemistry. He will do well to consult Sutton's Handbook of Volumetric Analysis and Parkes's Manual of Practical Hygiene.

An Afflicted Parent can surely have no difficulty in finding what he wants. We cannot undertake to nominate the proper person. Let him consult any hospital surgeon.

Dr. Maclagan, (Dundee.)—The letter shall be inserted in our next number.

INFANT MORTALITY IN LEICESTER.

MORE than half the deaths registered last quarter in Leicester were of children in their first year of life, and diarrhœa was the cause from which the greater number of these little ones died. It is the opinion of Dr. J. Wyatt Crane, the medical officer of health for Leicester, that this shockingly excessive diarrhœal mortality is not due to insanitary condition in the ordinary signification of those words. He considers that the mortality from the disease is due to a diminished capacity in the individual attacked to withstand its depressing effects; that it will especially be greater or less in proportion to the vigour of the infantile population, and that the excessive diarrhœal mortality in Leicester as compared with that in other manufacturing towns "arises from its position, situated as it were in a basin, which causes it to suffer from a more extreme degree of heat." Upon this latter point it is to be remarked that the mean temperature of the last summer quarter was in Leicester 59·2°; while in London it was 61·4°; in Nottingham, 59·1°; and in Bradford, 58·5°. A difference of less than one degree in temperature between Bradford and Leicester seems hardly a sufficient explanation of the difference between diarrhœal death-rates of 5·3 and 10·8 per 1000. But however this may be, it is unquestionable that in so far as the excessive diarrhœal mortality in Leicester is due to a "want of vigour in the infantile population," to that extent, if no farther, it is incumbent on the Leicester sanitary authorities to satisfy not themselves only, but the public at large, that this "want of vigour" is not due to causes which it is in their power to prevent or control.

"HOSPITAL SUNDAY."

To the Editor of THE LANCET.

SIR,—Two years ago you devoted a considerable portion of your space in advocating the above cause. Since then "Hospital Sunday," which at the time was an institution almost confined to Birmingham, has become an accomplished fact in Manchester, Carlisle, Newcastle-on-Tyne, Chester, Birkenhead, and many other towns. It has also been successfully carried out in Liverpool, the total amount realised by our first "Hospital Sunday" being £1869 9*s.* 1*d.*, while the expenses of printing, advertising, &c. (necessarily large for the first year), amounted to only £183 18*s.*, or less than 4 per cent. on the amount raised. It is very much to be hoped that this movement will spread, and that "Hospital Sunday" will become an institution throughout the length and breadth of the land. And my object in addressing you is in the hope of enlisting the services of your numerous readers in the good cause, as they can render much more valuable service than many are probably aware of.

One of the great difficulties we have to contend with is the *odium theologicum*. This is readily got over by a proper explanation of what the principle of "Hospital Sunday" is. It is simply this: that inasmuch as our hospitals, dispensaries, and medical charities generally afford relief to all, be their creed what it may, these charities have a claim on all congregations in all churches, chapels, and places of worship; or, as a correspondent in one of our local papers ably put it, "acute physical suffering appeals to everybody in a peculiar and special manner, and cannot, therefore, be compared or combined with an appeal for any other object." Hence collections for medical charities should be for medical charities only. This principle is thoroughly sound and quite unassailable.

But we can now turn to a still more convincing mode of argument, the "inexorable logic of facts." Wherever "Hospital Sunday" has been established on the above principles, the result has been most gratifying, and in some cases quite startling, exceeding the most sanguine expectations. Thus in Birmingham the annual amount since 1858 has averaged £4000, at an average expense of about £100; in Manchester the amount of its first trial was upwards of £5000, the expenses less than £200; in Liverpool, as we have already seen, the amount (less than what we may hope for in future years) was only £120 short of £5000, while the expenses were less than 4 per cent. Looking at the matter, therefore, in a business light, "Hospital Sunday" must be considered a success, since it would be impossible to point to any other mode of raising such large sums at so small an expenditure. Well would it be for our hospitals if such were the case. The cost of collecting, advertising, printing, &c., is a serious item in the hospital expenditure. Another very important point to be attended to is, that the appeal in any given town or district should be simultaneous and universal. The collection should be made on one given Sunday, and in every church, chapel, and place of worship, however small, where a congregation is assembled. By these means the claims of our hospitals are brought to the notice of thousands of persons who have no other opportunity of responding to them.

Much has been said of provident medical charities, and that our hospitals should be supported more than they are at present by the working classes. Surely it is a step in the right direction, and a beginning towards such an end, to enable the large number who attend church and chapel to become, so to speak, annual subscribers of an amount however small. The backbone of the voluntary system is, we are told, the pence of the poor. And surely we may hope that the time will come when our hospitals will be supported by the working classes, aided by the rich, rather than, as at present, supported by the rich, and aided, very feebly indeed, by the working classes.

In Liverpool and other large towns the hospitals must be considered not merely as local, but as county institutions, ministering, as they do, to the wants of a large and widely spread surrounding district. And here it is that medical men may assist largely in the cause. The influence of the doctor in country towns and villages is proverbial, and a branch "Hospital Sunday" should be established in every town and village from whence patients are sent to any given hospital, and the funds handed over to the treasurer of the "Hospital Sunday" fund. Of course the claims of any local hospital or dispensary should be first considered; but as country patients are generally in-patients, and often the most costly, it is only reasonable that all country towns and villages should share in the work.

There are several other matters to which I should like to have referred in connexion with this interesting subject; but I fear I have already occupied too much of your valuable space. Our second "Hospital Sunday" falls on the 14th January next, and "Hospital Saturday," a collateral institution, upon the 20th. Hoping that I shall be able to send you a most favourable account of the result,

I am, Sir, yours faithfully,

Liverpool, Nov. 7th, 1871. FRED. W. LOWNDES.

Mr. J. Quick, (Penzance.)—We quite concur with our correspondent in the estimate he has formed of the paragraph which he encloses. We can only express our surprise that any respectable journal should attempt to draw a parallel of the kind. In the first place, theft is one thing, and murder is another, and Kelly was tried for the latter. As to the statement about its being a not uncommon mistake to administer a dose of poison in hospitals for a dose of medicine, it is so unjustifiable and untrue that it will have no effect on anyone.

C.—If our correspondent has any doubt on the point, he should write to the Medical Department of the Local Government Board. Our advice is, destroy the sources of disease at any risk. He cannot tell what may be the result if he does not.

Dr. Hawkes.—The paper shall receive early insertion.

WELL-OILED URETHRA *vice* WELL-OILED CATHETER.

To the Editor of THE LANCET.

SIR,—Your correspondent on this subject, being "Only a Country Doctor," will, I am sure, not mind my referring him to my letter, where I premised that from the simplicity of the plan it had probably occurred to others; therefore he will see that I could not "be surprised to hear" that it had been recommended before. The fact that the plan had been recommended by Sir H. Thompson only adds to its importance, and relieves me of the feeling that my suggestion might be considered wanting in practical utility. Sir H. Thompson in the kindest manner called my attention to the paragraph in one of his works, and I should have acknowledged his courtesy in last week's LANCET had time permitted.

With regard to Druitt's Vade-Mecum, the one which I have in use is the very authority which recommends the well-oiled catheter.

I do not regret having mentioned my experience in this plan of treatment, because there are probably many general practitioners who have not seen the last edition of Druitt, and who do not, as a rule, purchase books which treat on special subjects alone, whereas their practice in these specialties is exceptional. To such general practitioners, even if they be "only country doctors," I hope I may have given a useful hint or reminder.

I remain, Sir, yours faithfully,

Grimston, Lynn, Norfolk, Nov. 21st, 1871. A. E. BARRETT.

To the Editor of THE LANCET.

SIR,—Your number for November 11th contains a letter from Mr. Barrett, recommending the injection of oil into the urethra previous to the use of the catheter. A far more convenient method of oiling the passage was suggested about a year since in, I think, your Journal—namely, to dip the catheter into a vessel containing oil, and whilst it remained in the oil to place the point of the finger of the right hand on the upper end of the catheter, and keep it there till the lower end of the instrument is inserted into the urethra, when the finger may be lifted off the top. On this plan the catheter will lift and carry a sufficient quantity of oil to the urethra; and when the finger is lifted, the oil will flow from the instrument into the canal, and lubricate the stricture. I have tried this plan in several cases of an aggravated character with marked success. Two of these patients were sent to the infirmary for the purpose of being punctured, as the surgeons in attendance, who were well up to their duty, had failed in passing the catheter. I tried the ordinary plan, and failed also; but on using the oil as already described, I succeeded without much trouble.

Yours, &c.,

Coleraine, Nov. 15th, 1871. JAMES C. L. CARSON, M.D.

*** We can insert no more letters on this subject.—ED. L.

Colonel Hardy, (Weston-super-Mare.)—We have taken steps to procure the information. Our correspondent might meanwhile furnish himself with a copy of the Army Medical Regulations, and obtain copies of the rules published in the Annual Reports of some civil hospitals.

A. B.—A M.R.C.S. does not violate any law in engaging in general practice; but he has not the legal power to enforce payment for medical services.

T. T.—We do not think the remuneration asked unreasonable.

DR. TAYLOR'S MODE OF EXTRACTING CATARACT.

To the Editor of THE LANCET.

SIR,—I was about to make some remarks on Dr. Chas. Taylor's linear-flap method of extracting cataract, which appeared some time ago in THE LANCET and in various other journals. The distinctive feature of the operation seemed to me to be that, instead of making a corneal incision at once, Dr. Taylor makes a small puncture with a narrow knife, and then enlarges the wound with another probe-pointed instrument, thereby making a lacerated wound instead of a clean corneal incision. I was, however, diverted from the disagreeable task of criticising by the title of the operation; for as "linear flap" implies a contradiction in terms, I thought it hardly worth while to discuss its scientific merits, being convinced that the author himself would ere long find out his mistake, and favour us with farther improvements. I regret, however, to find my reasonable anticipations disappointed; for Dr. Taylor's newest phase, as published in THE LANCET of November 4th, is a decided retrogression; and, as it seems to me to involve serious damage of human eyes, I take the liberty of offering the following remarks:—

1. A hard nuclear cataract cannot be extracted through a button-hole in the iris at its ciliary attachment without either lacerating that membrane or detaching it, or leaving some cortical fragments entangled in its meshes, and thus giving rise to subsequent mischief.

2. It is impossible to cut the button-hole to measure; and if made larger, or if the lens in its exit enlarges the opening, we may, instead of "obtaining that grand desideratum, a central and movable pupil," have two pupils, and, at any rate, we allow a detached portion of iris to flap over the pupil, like a sail in a calm.

3. Suppose that after the section the confluent vitreous prolapses, the operator would find himself in a most unfavourable position; for the iris flap would be in the way of his extracting the lens by means of a hook, &c.

Indeed the objections to Dr. Taylor's procedure are so many and serious, that if this operation had not appeared in the columns of THE LANCET with such beautiful engravings I could hardly have believed that a surgeon of Dr. Taylor's standing could seriously recommend it to the profession.

I am, Sir, yours, &c.,

Glasgow, Nov. 6th, 1871. J. R. WOLFE.

C. W.—Our correspondent is a better judge of the exact sum which would remunerate such exceptional services than we can be. All we can say is that it should be a large one, unless there are some special circumstances of friendship in the case, which are not stated. *Query*—How far is such attention to one patient consistent with a practitioner's duty to his other patients?

Assistant-Surgeon R.N. and L.K.Q.C.P.I.—The question of inquirer has been so often answered in our columns that we think it undesirable to continue the discussion raised by our correspondent, who must be aware that his opinion is at variance with the highest legal authorities.

T. E., (Adlington.)—Yes, and sometimes very much so.

MEDICAL BENEVOLENCE AND HANDBILLS.

WE subjoin two fine specimens of benevolence on the part of medical men. Bayswater and Barnsbury respectively are the favoured localities in which Mr. Freeman and John Whitehead, M.D. Erlangen, move and practise. We shall not keep our readers further from these choice specimens of the medical handbill than by a word of admiration for the feelings, parental and filial, which crop up in the Barnsbury bill. "In return" for the son, who is a chemist, supplying the Barnsbury public with all chemist's requisites at the lowest possible remunerative prices, the father, who is a M.D. of Erlangen, consents to give gratuitous advice at his son's every Wednesday morning. Such fine blending of public and private feeling is not often met with. We will begin with the Barnsbury bill.

"Dr. Whitehead begs to inform his patients and the public in general that, by repeated solicitations of many of his old patients, he has consented to return to his former residence, 7, St. James's-road (now 125), where he intends giving gratuitous advice Monday and Friday mornings from 9 to 11, Tuesday and Thursday evenings from 8 to 10 (occasionally Saturdays), and trusts that by his customary prompt attention in time of sickness, together with moderate cash charges, he will secure, as heretofore, the lion's share of the public in his immediate locality.

"Dr. W. begs to notify, for the convenience of the public in the neighbourhood, that he has entered into arrangements with his son, J. E. Whitehead, licenced chemist and druggist, 1, St. James's-terrace, Roman-road, Barnsbury, and they can now be accommodated at 125, St. James's-road, with all chemist's requisites, &c. &c., at the lowest possible remunerative prices. All patent and other medicines kept in stock. Dr. W. has consented to give gratuitous advice at his son's in return every Wednesday morning, 10 to 12.

"From the great success of the Barnsbury Self-supporting Dispensary, at 1s. per month, paid in advance, it will be continued as formerly.—N.B. All members' wives are attended in their confinements for the low sum of 10s. 6d. each. Inquiries at the surgery, 125, St. James's-road."

"BAYSWATER MUTUAL MEDICAL AID SOCIETY, for securing professional medical and surgical attendance, and the supply of all medicines to the subscribers. This Society is formed to enable persons, by payment of a small sum, to secure themselves efficient medical and surgical aid in case of illness or accident. All persons residing within the area of three miles of the 'Royal Oak,' Bayswater, can become members of this Society. It is not intended that persons who may be suffering from any chronic or inveterate disorder shall participate in the advantages of this Society. Terms of subscription: ten shillings per annum, payable quarterly or half yearly in advance. Hon. Sec., H. Harris, Esq.; Surgeon, Delamark Freeman, 20, Talbot-road, Bayswater, W. Subscriptions will be received between the hours of 10 and 11 o'clock in the morning, and from 7 to 8 in the evening, at 20, Talbot-road."

TESTIMONIAL-WRITERS BEWARE!

THE following card may serve as a warning to those who are "easy to be entreated" for a testimonial when they see to what uses such things may come. We have the less pity in exposing Dr. Cunningham's advertising style, as it is peculiarly unworthy of one who might have had a little faith in merit. If medical men who take honours are to advertise in newspapers, what is to be done by men who have no such history. Dr. Cunningham must know that Dr. Norman Macleod never contemplated such a use of his testimonial.

"CARD.—Dr. John Cunningham (Graduate in Medicine and Surgery of the University of Glasgow) begs to intimate that he will begin the practice of his profession on Wednesday, 1st November. He trusts that the success which attended him during his college career, and subsequently in practice, may gain for him the confidence of the community. Dr. Cunningham possesses most satisfactory certificates of merit from the medical professors of the University of Glasgow and others, one of which, from the Rev. Norman Macleod, D.D., he subjoins:—

"Oct. 25th, 1871.

"I hereby certify that I have been personally acquainted with Dr. Cunningham for some years, and that I have every confidence in his character and abilities, and in his skill as a medical man.

"NORMAN MACLEOD, D.D.

"Dr. Cunningham obtained at College—Highest honours in chemistry, practical chemistry, physiology, forensic medicine (equal for highest place in his year with another gentleman); honours in botany, surgery, midwifery, anatomy.

"Dr. Cunningham may be consulted at Mrs. Vigrow's, Kirk-street; and between the hours of 7 and 8 P.M. at Apothecaries' Hall, Main-street."

Mr. J. B. Fry has forwarded to us the photograph of what appears to be an extremely convenient hand ambulance, which he has successfully employed in the removal of small-pox patients at Swindon. The maker is Hill, of Swindon, and the cost £20.

Epsilon.—Apply to the Commissioners in Lunacy.

An Old Bachelor.—There is considerable force in our correspondent's line of reasoning; but it is scarcely necessary to enter upon it further than has been already done.

Dux.—We cannot afford our correspondent the information, and indeed it would be of no use to him for the purposes he names.

E. L. A.—The subject has been already discussed.

Mr. Albert Hind.—There is no such Society on any large scale. The only remedy is that supplied by the Medical Act, and this is not a very efficient one. It applies only to persons who falsely use recognised medical titles, which most quacks are ingenious enough to avoid doing; but if they use false titles they can be punished under the 40th clause of the Act of 1858.

A Hater of Humbug will see that the card he sends us has already been noticed. It is to be regretted that medical men should so approach to the ways of trade.

Mirabile Dictu.—The distribution of bills, such as that furnished by our correspondent, in the public street is, no doubt, calculated to degrade the profession; but the author of them is not likely to be affected by considerations of that kind.

Y. Z.—We regret that we know of no systematic work on Surgical Diagnosis to recommend to our correspondent.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—I beg to express my thanks for the valuable information contained in your issue of the 11th instant, in reply to certain queries I ventured to propose on the vexed subject of the Contagious Diseases Acts. I have now no further claim whatever on your attention, save to be allowed to state the conclusion which, by the help of the facts you have kindly furnished, I am inclined to hold. It is this, that unless the Acts apply to both sexes, the disease can never be stamped out; and unless it be extended to immoral women, whether they be public or private prostitutes, the disease will extend much as it does at present. Supposing such extension of the Acts, with adequate powers of enforcement also granted, it is evident that the whole female sex would be at the mercy of the very vilest of the other sex, and a power, incapable of efficient control, would be put into the hands of the police, and, I regret to speak of them in such a connexion, into the hands of medical men. Thinking mainly of what your own observation has presented to you of the strength and generally uncontrolled sway of the appetite in men, I think it would be desirable to pause before entering upon legislative enactments, and ask the question, *Quis custodes custodiet?*

I ought to say, by way of explanation of the query I put as to the strength and tyranny attributed by medical men to the sexual appetite, that I had never happened to find any stress whatever laid by them on the potent fact that nature never originates that appetite in the human race until there has been ample time first allowed for the rise and cultivation of the reason and of the moral and religious sentiments. No other passion of human nature is so clearly incapable of gratification as this, except in concurrence with, or in flagrant opposition to, reason, conscience, and religion.

Again expressing my thanks for the kindly notice taken of my difficulties,

I remain, Sir, yours truly,

November 18th, 1871. CONSTANT READER.

D. W. B.—1. We do not know of any work equal to that by Dr. Parkes, although it is undoubtedly mainly intended for military men. Our correspondent may refer to Pickford's Hygiene. — 2. Dr. Dobell has recently published a work on the subject.

Mr. D. Carroll has, we conceive, misunderstood the object and spirit of the testimonial. There was no assumption, gratuitous or otherwise, in the matter.

Nemo will find the article in a volume entitled "Fragments of Science for Unscientific People," by Prof. Tyndall, published by Longmans.

M. B.—We know nothing of the individual named.

Hospital Sergeant might apply to the Director-General through his surgeon.

G.—We have no information of the appearance of cholera in the islands of the Pacific.

ETHICS IN A CASE OF FRACTURED FEMUR.

WE have been requested to publish the following correspondence:—

[COPY.]

Lewdown, Exeter, Nov. 3rd, 1871.

DEAR SIR,—Mr. Wm. B—— called upon me this evening, asking me to see his father on Monday next. Upon inquiry, he told me that you had visited him yesterday (knowing he was my patient, without consulting me). May I ask if his statement is correct? Presuming it to be so, I have declined any further attendance on the case, which I leave in your hands. It is a case of fracture of the neck of the thigh-bone; but whether within or external to the capsular ligament will, I think, be a matter of doubt to a very good surgeon. Yours truly,

W. C. Northey, Esq. JOHN H. WILLIS.

[COPY.]

Tavistock, Nov. 8th, 1871.

DEAR SIR,—At the request of Mr. Wm. B——, I saw his father on Thursday last, and gave him my opinion of the case, which I understood from him he wished to get without my having seen you previously. I quite agree with you in diagnosis, and do not think anything more can be done than you have advised. I remain yours faithfully,

J. H. Willis, Esq. W. C. NORTHEY.

[COPY.]

Lewdown, Exeter, Nov. 10th, 1871.

DEAR SIR,—I beg to acknowledge the receipt of your very candid note of Nov. 8th, and at the same time to express my regret that your opportunities of acquiring a knowledge of professional etiquette should have been so extremely limited as to have allowed you to act as you have done. In thus writing I express not merely my own opinion, but that of several members of our profession, before whom I have laid the case.

I remain yours truly,

W. C. Northey, Esq. JOHN H. WILLIS.

*** It is unintelligible to us how a medical man can act as Mr. Northey did in the above case. To visit any case under the care of a professional brother, without his knowledge or consent, is contrary alike to reason and medical ethics; but to visit and examine a case of fracture is particularly indefensible. Let Mr. Northey consider for a moment what would become of the comfort and honour of medical men if another medical man were to be consulted furtively, and without meeting the practitioner in attendance.—ED. L.

Chemicus, (Liverpool.) — We have not yet reviewed Sutton's work on "Volumetric Analysis"; but we are sufficiently acquainted with its contents to say that our correspondent may confidently use it for the purposes he requires.

Mr. J. Jones Gale.—We cannot revert to a question which we regard as quite settled. Our correspondent's defence of the title in question is very circuitous and ingenious, but in no way alters our opinion.

SUBCUTANEOUS INJECTION OF MORPHIA IN CHOLERA.

To the Editor of THE LANCET.

SIR,—In your issue of last week appears a communication from Dr. Werry, of Constantinople, on the advantages of the subcutaneous injection of morphia in cholera, of which practice he thinks very favourably. I have tried the same plan in India; but am sorry to say that my experience has not been so satisfactory as Dr. Werry's. I have known the injection of morphia to be useful in calming spasm for a time, though only for a time; but I have met with no case in which the practice appeared to have any effect in arresting the progress of the disease. I also tried the subcutaneous injection of liquor ammoniæ, which in some cases acted powerfully as a temporary stimulant; but was of no permanent benefit so far as I could discover. Very many of the so-called remedies in cholera have got a name from having been tried towards the end of an epidemic, when, generally speaking, nearly all cases of the disease that occur have a tendency to recovery without the aid of medicine; so that if ditch water were used, or bread pills, the recoveries among those who took either the one or the other would be great, and this result might be said to be owing to the remedies employed. For example, bloodletting was employed at the end of one epidemic, and nearly all the patients in Bengal upon whom it was tried recovered. At the beginning of next epidemic every medical officer plied his lancet, and almost all their patients died. Dr. Werry, however, I observe, states that he used subcutaneous injections of morphia "soon after the outbreak of the disease," so that my remark does not apply to him.

I am, Sir, yours truly,

JAS. IRVING, M.D. Edin.,

Edinburgh, Nov. 21st, 1871. Surgeon-Major, Bengal.

CORRIGENDA.—In the annotation on Prof. Huxley's Lectures on Elementary Physiology, page 726, for "those parts of the nervous system included *between*," &c., read "those parts of the nervous system included *in* the spinal cord and optic lobes."—In Dr. Mount's letter, page 733, for "the bye-ways, which would have poisoned him outright, have been drained long ago," read "the bye-ways would have poisoned him outright, and Calcutta would have been drained long ago"; and in the concluding paragraph, to "water-carriage" add "of excreta."

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. B. Hicks; Dr. J. B. Sanderson; Dr. Grimshaw; Mr. Welch; Dr. Carter, Bristol; Mr. Harrison, Liverpool; Mr. Grant; Dr. Carroll; Dr. Maclagan, Dundee; Mr. Jessop, Leeds; Mr. T. Jones; Mr. Venman; Dr. Macadam, Edinburgh; Dr. C. Bell Taylor; Dr. R. Fowler; Mr. A. E. Barrett, Grimston; Mr. Britten; Mr. Brown; Dr. Wyer, Leamington; Dr. Paget, Cambridge; Dr. Hewson, Stafford; Dr. Wimberley; Dr. Fry, Swindon; Mr. Macrae; Mr. Keys; Mr. Geary; Mr. Balbirnie; Messrs. Southall, Son, and Dymond, Birmingham; Mr. Hopgood; Mr. Harris; Dr. Ball, Spalding; Dr. Irving, Edinburgh; Mr. Kennard; Mr. Buckle; Mr. E. Harper; Mr. Howard; Mr. Harries, Shrewsbury; Dr. Hornblow, Shipton-on-Stour; Mr. Peat; Dr. Harding, Whittlesea; Mr. Hales, Dorchester; Mr. Smart; Dr. Carson, Colchaine; Mr. Gregg; Dr. Millar; Mr. Wallis; Mr. Manning; Mr. Hind; Dr. Philipps, Exeter; Mr. Wakefield; Mr. Griffiths, Dublin; Dr. England, Moulton; Mr. Blackbee; Mr. Lawrence; Dr. Waters; Mr. R. H. Coombs, Bedford; Mr. Chapman; Mr. Moore; Mr. Robinson; Mr. Murdoch, Dumbarton; Mr. Matthews; Mr. Holmes, Rochford; Col. Hardy; Dr. Valentine, Simla; Dr. Hawkes, Hanwell; Dr. Lee, Coolattin; Dr. Quack, Penzance; Mr. Williams, Norwich; Mr. Tomlin; Mr. Brown; Mr. Perry; Dr. Grieve, Hampstead; Mr. Nicholls; Mr. Collins; Mr. Horne; Mr. Powell, Bromyard; Mr. Benson; Dr. Cammack, Spalding; Mr. Spencer; Dr. Royston; J. R. G.; A General Practitioner; Epsilon; An English Surgeon; A. B.; An Afflicted Parent; Methuselah; T. E.; M. C.; W. S. M.; F. M. S.; Y. Z.; Semper Paratus; E. Z. X.; A Regular Subscriber; Dex; M.R.C.S.; Nemo; An Old Bachelor; L.K. & Q.C.P.I.; Public Vaccinator; &c. &c.

Portsmouth Times, Bedfordshire Mercury, North British Daily Mail, Argyll Herald, Leek Times, Dublin Evening Express, O Correio Medico de Lisboa, Retford News, La Santé Publique, Allgemeine Medizinische Zeitung, Pembrokeshire Advertiser, Middlesborough Evening Gazette, and *Irish Times* have been received.

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